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THE ZOOLOGICAL RECORD

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MOLLUSCA

COMPILED BY

A. E. SALISBURY, A.M.I.E.E.

MARCIA A. EDWARDS, B.Sc.

AND

PAULINE CURDS, B.Sc.

LONDON
PUBLISHED BY
THE ZOOLOGICAL SOCIETY OF LONDON

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1963

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9. MOLLUSCA

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CONTENTS

I. TITLES 4

II. SUBJECT INDEX 47
General 47
Structure 50
Physiology 54
Development 58
Ecology 60
Zoogeography 65
Distribution 66
Land and Fossil 66
Marine 73
Geological 75

III. SYSTEMATIC INDEX 79
Monoplacophora 79
Amphineura 79
Gastropoda... 79
Prosobranchiata 80
Opisthobranchiata 95
Nudibranchiata 97
Pulmonata 97
Scaphopoda 104
Pelecypoda 104
Cephalopoda 117
Incertae Sedis 129

I.—TITLES

The year of publication of a title is omitted from the reference where it is the same as the volume year of the 'Record' namely 1960.

Opinion 582. Validation of the generic name *Pleurotomaria* as from Defrance, 1826 (Class Gastropoda). Bull zool. Nom. **17** : 276–280.

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Anon. (3). Index of Minutes 66–200. Min. Conch. Club Sthn. Calif. **200** : 2–9.

Anon. (4). Dr. Norman, T. Mattox. Min. Conch. Club Sthn. Calif. **197** : 5.

Anon. (5). Index of obituary Notices in Numbers 1–200. Min. Conch. Club Sthn. Calif. **198** : 8.

Anon. (6). Sorensen Collection [donated to the Californian Academy of Science] Veliger **3** : 52.

Anon. (7). Portrait of Dr. L. R. Cox, President 1957–1960. Proc. Malac. Soc. Lond. **34** : frontispiece.

Anon. (8). *Conus aegrotus* Reeve. Hawaiian Shell News **8**, 2, 1959 : 17.

Anon. (9). An extraordinary [*Conus*] *pulicarius*. Hawaiian Shell News **8**, 1, 1959: 4–5, figd. p. 5 **8**, 3, 1960.

Anon. (10). Lloyd E. Berry dies. Hawaiian Shell News **8**, 1, 1959 : 3.

Anon. (11). Another death recorded from bite of poison cone. Hawaiian Shell News **9**, 2 : 4, text-fig.

Anon. (12). R. C. Derrick dies at Suva, Fiji. Hawaiian Shell News **9**, 2 : 8.

Anon. (13). *Conus adversarius tryoni* Heilprin [Pliocene]. Hawaiian Shell News **8**, 4 : 3, fig.

Anon. (14). Some notes on *Cypraea*. Hawaiian Shell News **8**, 5 : 6, 7.

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Anon. (17). *Strombus maculatus* in Hawaii and its closely allied species. Hawaiian Shell News **8**, 7 : 1, 3.

Anon. (18). *Conus suturatus* Reeve, Hawaiian Shell News **8**, 11 : 2–3.

Anon. (19). New locality records for *Cypraea*. Hawaiian Shell News **8**, 10 : 5.

Anon. (20). Malformed *Conus ebraeus* figd Hawaiian Shell News **8**, 9 : 7.

Anon. (21). Dr. R. L. Alsaker [notice of death]. Hawaiian Shell News **8**, 9 : 3.

Anon. (22). A discussion and a revised listing of *Murex* subgenus *Homalocantha*. Hawaiian Shell News **8**, 9 : 3.

Anon. (23). Dr. Paul Bartsch dies. Hawaiian Shell News **8**, 8 : 6.

Anon. (24). [*Latirus nodus* figd.]. Hawaiian Shell News **8**, 8 : 5.

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II.—SUBJECT INDEX

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GENERAL LITERATURE

Monographs.—News, reviews, bibliographies, assessments of museum collections, reprints and notices of recent publications, **Drake, R. J. (1)**; Bivalves, **Franc, A.**; Apiacophora, **Fischer-Piette & Franc, (2)**; Catalogue of Austrian Gastropoda and some Pelecypoda, **Klemm, W. (3)** ; " Kingdom of the Octopus," 2nd. edit., **Lane, F. W.**; Ammonoid faunas of the Upper Triassic Pardonet formation, Peace River foothills, British Columbia, **McLearn, F. H., (1)**. Study of the systematics, zoogeography and ecology of Bulgarian molluscs (excl. Clausiliidae), **Urbański, J. (1)** ; On the genera *Terebra* and *Hastula* in Hawaiian Ids. **Weaver, C. S. (3)**.

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STRUCTURE
including HISTOLOGY

General Anatomy.—Additions, modifications and general study of Belgian molluscs, **Adam, W.** (1); *Ostrea spreta* and *O. puelchana* from Argentina, **Ageitos de Castellanos & Cabrera**; The basic structure of the opisthodetic ligament of the Lucinacea, **Allen, J. A.** (3); Glossary of morphological terms applied to ammonites, **Arkell, Kummel, Miller & Wright [in Moore]**; Colour and body form of *Gymnodoris* and *Nembrotha* from Japan, **Baba, K.** (1); Anatomy of *Rhodacmea cahawbensis* Walker, figs., **Basch, P. F.**; *Aplysia reticulopoda* from California waters, **Beeman, R. D.**; *Tylodina corticalis* from S. E. Australia studied from living specimens, **Burn, R.** (3); Australian bivalved gastropods, **Burn, R.** (5); General morphology and systematics of shipworms, **Carpine, C.**; *Tamanovalva limax* from Japan and Australia, **Chopard, L.**; Abalone with shell removed, **Cox, K. W.**; Soft parts of Gastropoda, **Cox, L. R.** (6); *Tamanovalva limax*, **Cox & Rees**; History of structure and evolution of form in fossil bivalves, **Dechaseaux, C.**; *Aplysia* world species, **Eales, N. B.** (3); General Molluscan anatomy and class distinction, **Ehrenberg, K.**; Scaphopod anatomy, **Fantinet, D.**; Polyplacophora, **Fischer-Piette & Franc** (1); Aplacophora, **Fischer-Piette & Franc** (2); Anatomy of Zonitinae figs., **Forcart, L.** (1); Relation between weight, size and chemical composition in *Mytilus*, **Fraga, F.** (2); General anatomical details of *Helix pomatia*, **Gijzen, A.**; Fossil deformation, **Gräf, I. E.**; Anatomy of *Semisulcospira bensoni* (Phil.) figs., **Itagaki, H.**; Fossil and recent Monoplacophora, **Knight & Yochelson**; Mesozoic ammonites and belemnites, **Krymgol'ts, G. Y.**; Split-arm specimen of *Octopus briareus*, **Kumpf, H. E.**; Pallial cleft and respiratory apertures not present in juvenile abalone, **Leighton, D. L.**,; Monoplacophora, **Lemche & Wingstrand**; Recent and fossil Scaphopoda, **Ludbrook, N. H.** (2); *Phyllaplysia zostericola*, **McCauley, J. E.**; External features of Olividae, **Marcus, Ev. & Er.** (1); Opisthobranchia from American Atlantic waters, **Marcus, Ev. & Er.** (3); The poison mechanism of *Conus mediterraneus* and its histology, **Martoja, M.**; Relative size of of organs in male and female *Eledone*, **Morales & Bas** (1); *Stephopoma mamillatum* sp. nov. general anatomy, **Morton & Keen**; Structure of Amphineura, Scaphopoda and Cephalopoda, **Muus, B. J.**; ♂ *Pterotrachea coronata* collected at Umtentweni, Natal, **Okutani & Habe**; *Tamanovalva limax*, **Ortiz, E.**; Morphological features distinguishing the various molluscan groups, **Pchelintzev & Korobkov [in Orlov]**; Mediterranean forms of *Diaphorodoris*, **Portmann & Sandmeier** (1); Torsion and asymmetry of gastropods, **Pruvot-Fol, A.**; *Brechites penis*, **Purchon, R. D.** (1); Diagnostic features, external appearance, and external variation in British slugs, **Quick, H. E.** (4); Jurassic and Cretaceous ammonites, **Reyment, R. A.** (1); *Meledella werneri*, **Riedel, A.** (1); General morphology of *Mangelia* after removal of the shell and opening of the mantle cavity, **Robinson, E.**; *Aptychus* spp., **Scatizzi, I.**; *Belemnitella* and *Belemnella* comparisons, **Schmid, F.** (2); Bivalve Mollusca Order Dysodonta, **Skarlato, O. A.**; Recent and fossil Amphineura, **Smith, A. G.** (3); Unionidae from Belgrade, **Tadić, A.** (1); Cnidosacs at the tips of eolidacean nudibranch papillae, **Thompson, T. E.** (5); *Bythinella lacheineri*, **Toffoletto, F.**; Dwarf ammonites, **Vogel, K-P.** (1); Structure and function of siphonal pillars in *Hippurites*, **Vogel, K.** (2); Freshwater Mollusca, **Ward & Whipple**; General characters of Mollusca, **Yonge, C. M.** (2); Veliger larvae of *Tapes variegata*, **Yoshida, H.**; Arms, web and significance of the shell and web of the paper nautilus, **Young, J. Z.** (4);

External Anatomy.—*Strombus* from the Indo-Pacific, **Abbott, R. T.** (5); Plates in the integument of Polyplacophora, **Fischer-Piette & Franc** (1); Aplacophora, **Fischer-Piette & Franc,** (2); External features of *Ringicula buccinea*, **Fretter, V.**; Morphological nomenclature

and structure of Laevaptychi, **Gąsiorowski, S. M.**; Cave dwelling *Carychium stygium*, **Hubricht, L.** (8); Gills and palps as feeding mechanisms of the oyster, **Nelson, T. C.**; Body forms characteristic of *Elysia chlorotica*, **Pfitzenmeyer, H. T.** (2); *Donice banyulensis* external anatomical details, **Portmann & Sandmeier** (2); External form and pigmentation of *Boettgerilla*, **Wiktor, A.** (3).

Nacreous Growth.—Crystalline shell structures seen in Mollusca, **Bouillon J.** (2); Nacreous layers and microscopic shell structure details, **Eberzin, A. G. [in Orlov]**; Pearl formation and structure, **Franc, A.**; Structure of the organic components in pelecypod mother of pearl, **Grégoire, C.**; Crystalline structure of cultured pearls and pearl sac formation, **Wada, K.**.

Radula.—*Strombus gibberulus gibbosus* pl. 16 pl. 115 f.6–8; *S. canarium* pl. 24; *S. taurus* pl. 35; *S. u. urceus* pl. 42 f. 1,2; *S. e. erythrinus* pl. 42, f. 3,4; *S. helli* pl. 42. fig. 5; *S. mutabilis* pl. 49. figs. 1–5; *S. microurceus* pl. 49. f. 6; *S. terebellatus afrobellatus* pl. 49 f.7; *S. fusiformis* pl. 54; *S. plicatus columba* pl. 64; *S. m. marginatus* pl. 75; *S. minimus* pl. 81, f. 5; *S. epidromis* pl. 84 f. 1–5; *S. v. vittatus* pl. 88; *S. v. campbelli* pl. 90; *S. lentiginosus* pl. 95, f. 1–4; *S. pipus* pl. 97; *S. aurisdianae* pl. 102 f. 1–6; *S. bulla* pl. 105; *S. v. vomer* pl. 108; *S. luhuanus* pl. 112 f. 1–5; *S. d. decorus* pl. 113 f. 1–5; **Abbott, R. T.** (5); *Gymnodoris nigricolor, G. subornata* and *Nembrotha limaciformis* figs., **Baba, K.** (1); *Okenia opuntia, O. plana, Goniodoridella savignyi, Goniodoris sugashimae*, figs., **Baba, K.** (2); *Greilada abei, Palio amakusana* and *Thecacera pennigera* figs., **Baba, K.** (5); *Charitodoron* Tomlin, radula proves genus belongs to Mitridae and not to Buccinidae, **Barnard, K. H.** (2); *Nux alabaster* Barnard, *Thalassocyon bonus* Barnard, figs., **Barnard, K. H.** (3); *Bulimulus tenuissimus* and figs., **Barros Araujo J. L. de et al**; *Rhodacmea cahawbensis* Walker, fig., **Basch, P. F.**; *Acochilidium amboinense* p. 186 fig. 1 e-h, *A. weberi* p. 186, fig. li. **Bayer & Fehlmann**; *Aplysia reticulopoda* pl. 46, p. 147; **Beeman, R. D.**; *Gonaxis lamottei* and *G. montisnimbae* from Guinea, **Binder, E.**; *Tylodina corticalis* fig. 9 A-C, **Burn, R.** (3); *Berthelinia typica* & *Midorigai australis* figs., **Burn, R.** (5); *Limapontia capitata* and *Stiliger bellulus* radulae teeth fig'd. **Chukhchin, V. D.**, (1); *Calliostoma oregon* Clench and Turner; *C. zizyphinum* Linné; *C. jucundum* Gould; *C. pulchrum* Adams; *C. coppingeri* Smith; *C. occidentale* Mighels and Adams; *C. roseolum* Dall; *C. yucatecanum* Dall; *C. bullisi* Clench and Turner; *C. jujubinum* Gmelin; *C. bairdii* Verrill and Smith; *C. oregon* Clench and Turner; *C. rosewateri* Clench and Turner; *C. psyche* Dall; *C. schroederi* Clench and Aguayo; *C. marionae* Dall; *C. hendersoni* Dall; *C.* (*Astele*) *subcarinatum* Swainson; **Clench and Turner** (1); *Petalifera habei* n. sp. and *P. petalifera* figs., **Eales, N. B.** (1); *Aplysia dactylomela, A. parvula, A. californica, A. brasiliana, A. cervina, A. cronullae, A. denisoni, A. extraordinaria, A. fasciata, A. gracilis, A. keraudreni, A. morio, A. oculifera, A. pulmonica, A. rehderi, A. reticulata, A. sagamiana, A. sowerbyi, A. sydneyensis, A. willcozi* var *perviridis, A. cedrosensis, A. depilans, A. dura, A. juliana, A. nigra, A. vaccaria, A. euchlora*, figs., **Eales, N. B.** (3); *Proneomenia weberi, P. sluiteri; Dondersia festiva, D. californica, Proparamenia bivalens, Alexandromenia valida, Macellomenia palifera, Pruvotina impexa, Epimenia verrucosa, E. ohshimai*, fig. 1506, p. 1671, *Simrothiella margaritacea Prochaetoderma raduliferum; Crystallophrisson gutturosum, C. nitidulum*, fig. 1507, p. 1672, **Fischer-Piette & Franc** (2); *Achatina fulica* figs., **Gijzen, A.**; *Trapania maculata, T. fusca, T. tartanella, T. lineata, Caloria maculata*, figs., **Haefelfinger, H-R.** (1); *Polycera quadrilineata* figs., **Haefelfinger, H-R.** (3); " *Pettancylus* " *australicus* text -fig. 4., **Hubendick, B.** (1); *Ancylus tapirulus, A. scalariformis, A. lapicidus* **sp. nov.** *Acroloxus improvisus, A. macedonicus*, from Lake Ochrid. figs., **Hubendick, B.** (2); *Semisulcospira bensoni* (Philippi) figs. **Itagaki, H.**; *Pagodulina pagodula* fig. 7, **Jackiewicz & Rafalski**; Radula, buccal mass and feeding in *Cypraea caputserpentis* figs., **Kay, A.**; *Conus geographicus*, figs., **Keegan, H. L.**; *Dendropoma marchadi, D. tholia, D. ghanaense* spp. nov. and *D. lamellosa* and *D. irregulare*, figs., **Keen & Morton**; *Conus striatus* radula tooth and fig., **Kohn, Saunders & Wiener**; Gastropoda in general, *Buccinum undatum* fig. in particular, **Korobkov, I. A.**, (3); *Phyllaplysia zostericola* new species figs., **McCauley, J. E.**; *Ternivoluta studeri* fig. 1A, *Mesericusa sowerbyi* fig. 1B, *Aulica flavicans* fig. 1C, *Cymbiolista hunteri*, fig. 1D, **McMichael, D. F.**; *Bulinus truncatus sericinus* fig. 2b; *B. mutandaensis* figs. 2c-e; p. 570, **Mandahl-Barth, G.**; *Olivella, Oliva, Lintricula* and *Olivancillaria* radula patterns, figs., **Marcus, Ev. & Er.** (1); *Unela remanei* p. 141, figs. 11, 12; *Stiliger vanellus* p. 145, fig. 16; *S. vossi*, p. 145, fig. 21; *S. costai* p. 148, fig. 24; *Costasiella nonatoi* p. 148, fig. 29, *Elysia evelinae* p. 152, fig. 35, *Tridachia crispata* p. 155, figs. 39,–42, *Polycerella conyna* p. 160, fig. 45, *P. aurisula* p. 160, fig. 47, *Okenia evelinae* p. 163, figs. 50, 51, *Doto divae* p. 163, fig. 56, *D. chica* p. 168, fig. 60, *Armina mülleri* p. 168, fig. 61, *Capellinia concicla* p. 174, fig. 70, *Catriona lina* p. 174, figs. 72, 73, *C. maua* p. 178, figs. 75–78; *Learchis poica* p. 184, figs. 83–85, *Dondice occidentalis* p. 184, figs. 88–90; *Lamellaria perspicua* p. 188, fig. 97, **Marcus, Ev. & Er.** (3); Radula and jaws of Succineidae, **Miles, C. D.**; *Stephopoma mamillatum* n. sp. figs., **Morton & Keen**; *Cyclope neritea, Nassarius incrassatus* and *N. reticulatus* figs., **Morton, J. E.**, (2); *Acanthochiton, fascicularis* p. 30, *Siphonodentalium lobatum* p. 57, *Dentalium occidentale* p. 57, *Loligo forbesi* p. 81, fig'd., **Muus, B. J.**; *Pterotrachea coronata*, figs., **Okutani & Habe**; *Drepanotrema surinamense*, p. 261, figs. 5–8, **Paraense & Deslandes**; *Diaphorodoris* p. 177, text-fig. 3, **Portmann & Sandmeier** (1); Buccal armature of *Donice banyulensis*, **Portmann & Sandmeier** (2); *Testacella* representative radular teeth figs., *Geomalacus maculosus, Arion* representative teeth figs., *Milax, Agriolimax; Limax tenellus, L. flavus, L. cinereoniger, L. maximus, Lehmannia marginata, L. poirieri, L. nyctelius*, figs, **Quick, H. E.** (4); *Meledella verneri* & figs., **Riedel, A.** (1); *Lindbergia* (*L.*) *pseudoillyrica, L.* (*Echinophalus*) *uminskii*, figs., **Riedel, A.** (2); Porcelain shells, **Schilder, F. A. & M.**; *Acrorbis odhneri* n.sp. **Scott, M. I. H.** (1); Radula sheath and poison darts in *Conus* proboscis, **Rretz, S. M.**; A safe method of " handling " and mounting minute radulae, **Turner, R. D.** (1); *Zaphysema gaussoini, Z. tenerrima, Eutrochatella circumlineata, Chondropoma navassense* figs., **Turner, R. D.** (2); *Bukobia kikuyuensis* n.sp. figs. Kenya, **Urban, S.**; *Azeca menkeana* fig. **Venmans L. A. W. C.**; *Helicarion hians, Tayloria urquessensis Gonaxis craveni, G. quadrilateralis, G. percivali*, **Verdcourt, B.** (10); *Limax valentianus* p. 28, fig. 8, *Deroceras caruanae* p.33, fig. 9, from Sweden, **Walden, H. W.**; *Physa humerosa, Helisoma trivolvis, Lymnaea stagnalis, Lanx subrotundatus, Gundlachia meekiana, Viviparus intertextus, Pomacea paludosa, Valvata tricarinata Amnicola porata, Leptoxis dissimilis, Lepyrium showalteri* figs., **Ward & Whipple**; *Conus jaspedius* Gmelin, fig. 1, *C. ranunculus* Hwass, fig. 2, *C. regius* Gmelin, fig. 3, *C. daucus* Hwass, fig. 4, *C. spurius* Gmelin, fig. 5, *C. juliae* Clench, fig. 6, *C. mus* Hwass, fig. 7, **Warmke, G. L.**; *Boettgerilla vermiformis* plus figs., **Wiktor, A.** (3).

Shell.—The hinge structure of the Lucinacea, **Allen, J. A., (3)**; Relationship between shell colour and light intensity in *Mytilus*, **Andreu, B.**; The shell, from a morphological point of view, of Mesozoic Ammonoidea, **Arkell, Kummel & Wright, [in Moore]**; Intermediate hosts of *Schistosoma mansoni* 2 shell types and intermediary forms, **Barretto, A. C.**; Hinge line of Erycinacea and Cyamiacea, **Chavan, A.**; Nomenclature used for Pleurotomariidae, **Cox, L. R. (2)**; Gastropod shell structure and nomenclature, **Cox, L. R. (6)**; Riblet frequency as a taxonomic character in terrestrial Mollusca, **Cumber, R. A.**; Buoyancy of the cuttlebone of the cuttlefish, **Denton, E.**; The hinge structure and the musculature of *Pseudavicula* from the Mesozoic, **Dickins, J. M. (1)**; Dentition of *Merismopteria*, **Dickens, J. M. (2)**; Non-marine Carboniferous lamellibranch shell-shape trends, **Eagar, R. M. C.**; Deposition of Ca CO_3 on snail shells and the effect of sewage effluents, **Edwards & Heywood**; Scaphopod shell structure, **Fantinet, D.**; Structure and ornamentation shown by recent bivalves **Franc, A.**; Shell growth of *Physa* with carbonic anhydrase inhibition, **Freeman, J. A.**; The hinge line and ligament of Noetidae and Carditidae, **Freneix, S. (2)**; Shell structure of young *Limnocardium* assigned to the genus *Replidacna*, **Gillet, S. (2)**; Shells of *Catinella* from Maryland, and Michigan fig. 1, **Grimm, F. W.**; *Gryphaea* shell variations, **Hallam, A. (2)**; Larval shell of *Elysai* (*E.*) *hamatanii*, **Hamatani, I. (1)**; Shell angles and structure of Jurassic inoceramids from Japan, **Hayami, I. (2)**; Types of, and theories on coiling in ammonite shells, **Holland, C. H.**; "*Pettancylus*" *australicus*, figs. 1–3, **Hubendick, B. (1)**; Characters which modify shell shape of *Pinctada* and vary with the ecological conditions, **Hynd, J. S.**; *Pagodulina pagodula*, **Jackiewicz & Rafalski**; Convex and concave septa in Liassic specimen of *Lytoceras* from Hungary, **Jámbor, Á.**; Shell formation in gastropods and lamellibranchs, **Kado, Y.**; Shell incrustations of a chemical nature on *Anodonta cellensis*, **Komárek, K.**; Fossil lamellibranchs and gastropods, figs. of the majority of shell forms possible, **Korobkov, I. A. (3)**; Trace elements in fossil and recent littoral gastropod shells, **Krinsley, D.**; Shell secretion in *Lymnaea ollula*, **Kubota, T.**; Juvenile *Haliotis rufescens* lacking respiratory apertures, **Leighton, D. L.**; Monoplacophora (*Neopilina*), **Lemche & Wingstrand**; Naming of shell parts and typical shell structure of gastropods, **Macan & Cooper**; Damage caused by *Panopeus* to shells of *Crassostrea*, **McDermot, J. J.**; Interpretation of varices and growth ridges on *Eupleura caudata* shells, **MacKenzie, Jr., C. L.**; Shell colour and habitat of *Nerita* in Bombay, **Mahdihassan, S.**; General study of all aspects of molluscan shells, **Manigault, P.**; *Hydrobia* from French littoral zones, **Mars, P. (2)**; Morphogenesis *Nanaochlamys*, **Masuda, K. (2)**; Shell, pallets and siphons of *Teredo* and *Bankia* from S. Japan, **Mawatari & Kitamura**; Shell growth to counteract living inclusions such as settling *Mytilus*, **Merrill, A. S.**; The Succineidae in Kansas, **Miles, C. D.**; Amphineura, Scaphopoda and Cephalopoda, **Muus, B. J.**; Shell forms of *Anadara granosa* (L.) figs., **Nagasawa, J. (1)**; *Umbonium*, tubercle development in relation to water temperature, **Nagasawa, J. (2)**; Variation of *Rapana thomasiana*, **Nagasawa, J. (3)**; Shell formation and regeneration after injection of RNA in *Ariophanta*, **Nair & Muthe**; Shell color patterns of *Theodoxus fluviatilis*, **Neumann, D. (2)**; The hinge of Black Sea Veneridae, **Nevesskaya, L. A.**; Study of Permian Pseudomonotids and the origin of oysters, **Newell, N. D.**; Skeletons, shelters and special defences of Mollusca, **Nicol, J. A. C. (3)**; *Tamanovalva limax* a bivalved gastropod, **Ortiz, E.**; *Drepanotrema surinamense* aspects of the shell, **Paraense & Deslandes**; Crystallography of shells of Muricidae, **Petitjean, M.**; Shell variations in British slugs, **Quick, H. E., (4)**; Shell structure and species problem in *Pinctada*, **Ranson, G. (1)**; Larval shell characters used to classify the Ostreidae, **Ranson, G. (2)**; New *Lindbergia* species from Bulgaria, **Riedel, A. (2)**; The ammonoid suture line genetic terminology, **Ruzhentzev, V. E. (1)**; Shell descriptions of land and freshwater molluscs in the Madras Government Museum collection, **Satyamurti, S. T.**; Correlation between shell structure and radula, **Schilder, F. A. & M.**; Structure, development and terminology of ammonite suture lines, **Schindewolf, O. H., (1)**; The ammonoid shell and epizoans as a key to ammonoid ecology, **Seilacher, A.**; *Cardium edule* shell organic matrix studied, **Simkiss, K.**; *Chlamys beringianus*, *Mytilus laevigatus* & *M. grayanus*, **Skarlato, O. A.**; Sutural ontogeny of ammonites, **Sornay, J.**; Cretaceous oysters, **Stenzel, H. B.**; Injuries in shells of nautiloids, **Stumbur, K. A.**; Manganese deposits on *Anodonta* shells, **Táborský, K.**; Unionidae, **Tadić, A. (2)**; Variation in sculpture and coloration of *Haliotis coccoradiata* in Australia, **Talmadge, R. R. (2)**; Spectrographic analysis for Mg, Sr and Ba in molluscan shells, **Turekian & Armstrong**; The sutures of dwarf ammonites, **Vogel, K-P. (1)**; Influence of the organic matrix on crystal type, **Watabe & Wilbur**; Race identification of Sepioids using the shell locular index, **Yagi, T.**; Slit and inductura in Permian bellerophontaceans, **Yochelson, E. L. (2)**; Shell structure during development of *Tapes variegata*, **Yoshida, H.**

Conchometry.—Correlation of shell height, width and aperture of Eemian molluscs, **Brodniewicz, I. (1)**; Biometric study of *Pisidium* recent and Pleistocene populations, **Brodniewicz, I. (2)**; *Cepaea nemoralis* shell characters, Ireland, **Cook & Peake**; Gastropod conchometry, **Cox, L. R. (6)**; *Hellicella* (*Cernuella*) *profuga* variations, Italy, **De Joanna & Sacchi**; Dentition, growth lines and general shell measurements of fossil lamellibranchs, **Eberzin, A. G. [in Orlov]**; Scaphopod conchometry, **Fantinet, D.**; Statistical study of coiling in *Gryphaea*, **Joysey, K. A.**; Internal volume measurements of *Dinocardium*, **Kornicker, L. S.**; Japanese Cenozoic Turritellidae, **Kotaka, T. (1)**; Biometric analysis of the shell, morphology and terminology used for Nuculanidae, **Kumpera, Prantl & Růžička**; Ammonite conchometry, **Obata, I., (2)**; Evolution of hinge in Sarmatian Mactridae, **Sidorova, N. P. (1)**; Statistical study of Liassic belemnites, **Sturz-Köwing, I. (1)**; Changes in the rostrum of belemnites in the upper Lias, **Sturz-Köwing, I. (2)**; Biometric study of Pliocene *Viviparus*, **Taboyakova, V. Y.**.

Mantle and Associated Structures.—Ligament of *Cochlodesma praetenue*, **Allen, J. A. (2)**; The ligament and the mantle of Lucinacea, **Allen, J. A. (3)**; Mantle of scales in *Lepidoteuthis grimaldii*, **Clarke, M. R.**; Structure and function of the lamellibranch mantle, **Eberzin, A. G. [in Orlov]**; Foot and mantle of *Cypraea caputserpentis*, **Kay, A.**; Mantle appendages and pedal glands of Olividae, **Marcus, Ev. & Er. (1)**; Pallial organs, pedal gland and general features of British slugs, **Quick, H. E. (4)**; Mantle and pallial organs of *Biomphalaria pfeifferi*, **Schutte & van Eeden**; Mantle cavity of *Lepeta concentrica*, **Yonge, C. M. (1)**.

Cytology.—Specialized cell membrane regions in gill epithelia of *Mytilus*, **Afzelius, B.**; The substellar muscle receptor organ in *Eledone*, **Alexandrowicz, J. S. (1)**; Histological study of *Sepia* heart innervation, **Alexandrowicz, J. S. (2)**; The histology of the cephalopod alimentary canal and its associated glands, **Arvy, L. (2)**; Cytological differences during spermatogenesis of

Australorbis, **Barth & Jansen (1)**; "Kinoplasma" in spermatogenesis of *Australorbis*, **Barth & Jansen (2)**; Histological study of chromosomes and chromosome numbers of slugs. **Beeson, G. E.**; Electron microscope study of yolk globules in *Haliotis* oocytes, **Bolognari, A. (1)**; Ribonucleic acid complex in Walker's tumour cells of *Patella*, **Bolognari, A. (2)**; Nuclear apparatus studied during egg development, **Bolognari, A. (3)**; Electron microscopic study of yolk formation in *Patella* and *Aplysia* oocytes, **Bolognari, A. (6)**; Cytological study of Golgi bodies and zones in *Aplysia* oocytes, **Bolognari, O.**; Chromosome morphology of snails, **Burch, J. B. (1)**; Chromosome studies on aquatic pulmonates, **Burch, J. B. (2)**; Chromosomes of *Gyraulus* and polyploidy in snails, **Burch, J. B. (4)**; Cytoplasmic inclusions of neurones of *Pila globosa*, **Chatterjee, N.**; Cytological study of *Helix aspersa* and *H. pomatia*, **Evans, H. J.**; The Golgi bodies and their division during gametogenesis, **Gatenby, J. B.**; *Achatina fulica* heart and pericardium, **Ghose, K. C. 2)**; *Loligo vulgaris* sucker innervation, **Graziadei, P. (1)**; The stellate ganglion cells of *Sepia officinalis*, **Graziadei, P. (4)**; Cytology and histochemistry of *Helix pomatia* mantle, **Guardabassi & Piacenza**; Central nervous system of *Strophocheilus rosaceus*, **Haeckel, W.**; Cytological studies on Melaniidae, particularly polyploidy and parthenogenesis, **Jacob, J.**; Electron microscope study of the adductor muscle of the file shell, **Kawaguti & Ikemoto (1)**; *Tamanovalva limax* single adductor muscle, **Kawaguti & Yamasu (3)**; Amylase secreting cells of the molluscan crystalline style, **Kubomura, K.**; Shell gland cells of *Lymnaea ollula* embryos 6 days after fertilization, **Kubota, T.**; The "Golgi apparatus" in the cells of a developing *Lymnaea stagnalis* egg, **Malhotra, S. K.**; Chromosomal study of some Stylommatophora and Basommatophora, **Natarajan, R. (2)**; Detailed oyster gill anatomy, **Nelson, T. C.**; Histology of *Pholas* light organs, **Nicol, J. A. C., (1)**; Electron microscope study of *Helix pomatia* digitate glands, **Nolte, A.**; Cell differentiation in the regenerate of the snail, **Pande, B. P.**; The Golgi substance in unsegmented *Barnea* eggs, **Pasteels & Mulnard**; Passage, at microscopic level, of cytoplasmic materials in the nucleus of Gastropoda nerve cells, **Quattrini, D. (3)**; Cytological study of RNA in early oogenesis and veligers of *Pila virens*, **Ramamoorthi, K. (3)**; Aster-associated particles in the cleavage of molluscan eggs, **Rebhun, L. I.**; Chromosomal structure, **Schlote, F-W.**; *Aplysia* hepatopancreas, **Schreiber, G.**; Nucleolar structure in oocytes of *Helix* and *Cepaea*, **Serra, J. A.**; The hepatopancreas of certain Mollusca, **Vasconcelos Frazao, J. (1)**; Glandular epithelium of the hepatopancreas of various molluscs, **Vasconcelos Frazao, J. (2)**.

Sense Organs.—Ionic composition of squid photoreceptors, **Adams & Hagins**; Sense organs of bivalves, **Franc, A.**; Sensory structures and their nervous supply in *Loligo vulgaris*, **Graziadei, P. (5)**; Electron microscope study of octopus photoreceptors, **Moody & Robertson**; Sensory organs and reception in the Mollusca, **Nicol, J. A. C. (3)**; Statocysts, *Octopus vulgaris*, **Young, J. Z. (1)**.

Luminous Organs.—Bacterial light organs in squids, **Nicol, J. A. C. (2)**.

Alimentary System.—Jaws of *Calliostoma bairdii*, *C. rosewateri*, *C. schroederi*, *C. hendersoni*, and *C.* (*Astele*) *subcarinatum* fig., **Clench & Turner (1)**; Moulds of *Nuculana* intestines from the Lias compared with recent digestive systems of the Nuculacea, **Cox, L. R. (5)**; Nutrition, digestion, absorption and structure in Polyplacophora, **Fischer-Piette & Franc, (1)**; Aplacophora, **Fischer-Piette & Franc (2)**; Digestive system of bivalves and variations which occur, **Franc, A.**; Alimentary system of *Ringicula buccinea*, **Fretter, V.**; Dissection of the alimentary canal and isolation of the posterior salivary glands of *Octopus macropus*, **Ghiretti, F.**; Innervation of *Sepia* alimentary canal, **Graziadei, P. (2)**; Alimentary tract of "*Petlancylus*," **Hubendick, B. (1)**; Of Ancylidae from Lake Ochrid, **Hubendick, B. (2)**; Oesophagus, stomach, intestine and digestive gland of *Cypraea caputserpentis*, **Kay, A.**; Amylase secreting cells of the molluscan crystalline style, **Kubomura, K.**; Digestive system of *Phyllaplysia*, **McCauley, J. E.**; Alimentary tracts of *Olivella*, *Oliva*, *Lintricula* and *Olivancillaria*, **Marcus, Ev. & Er. (1)**; The molluscan stomach and its mechanism, **Morton, J. E. (1)**; Stomach and style sac of *Cyclope neritea*, **Morton, J. E., (2)**; A generalization of molluscan digestion, **Portmann, A.**; *Diaphorodoris* from the Mediterranean, **Portmann & Sandmeier (1)**; Hepatic diverticulae and alimentary canal of *Donice*, **Portmann & Sandmeier (2)**; Sorting mechanisms and digestive structures developed by molluscs, **Nicol, J. A. C., (3)**; The stomach in the Eulamellibranchia, **Purchon, R. D. (2)**; Alimentary canal structure of British sluga, **Quick, H. E. (4)**; The digestive system of *Mangelia brachystoma*, **Robinson, E.**; Hepatopancreas of *Aplysia*, **Schreiber, G.**; Digestive system of *Biomphalaria pfeifferi*, **Schutte & van Eeden**; The digestive gland of *Dendronotus frondosus*, **Thompson, T. E. (4)**; *Bukobia kikuyuense* fig. **Urban, S.**; Hepatopancreas of certain Mollusca, **Vasconcelos Frazao, J. (1)**; Glandular epithelium of the hepato-pancreas of *Patella*, **Vasconcelos Frazao, J. (2)**; The gut of *Boettgerilla vermiformis*, **Wiktor, A. (3)**.

Muscular System.—Muscle receptor organ in *Eledone*, **Alexandrowicz, J. S. (1)**; Musculature of *Meriomopteria*, **Dickins, J. M. (2)**; Effect of "maladie du pied" on the closing mechanism of oysters, **Durve & Bal**; Polyplacophora, **Fischer-Piette & Franc, (1)**; Musculature and connective tissue systems of Aplacophora, **Fischer-Piette & Franc (2)**; Variations in form of the mantle and musculature of recent bivalves, **Franc, A.**; Adductor muscles and pallial organs of "*Petancylus*", **Hubendick, B. (1)**; Adductor muscle of *Promantellum hirasei*, **Kawaguti & Ikemoto (1)**; Electron microscope study of adductor muscle patterns in the clam, **Kawaguti & Ikemoto (2)**; Formation of the adductor muscle in *Tamanovalva*, **Kawaguti & Yamasu (1)**; Electron microscope study of *Tamanovalva* adductor muscle, **Kawaguti & Yamasu (3)**; Musculature of the poison gland of *Conus mediterraneus*, **Martoja, M.**; Muscular impressions in the shell of *Pinctada*, **Ranson, G. (1)**.

Vascular System.—Innervation of *Sepia* hearts, **Alexandrowicz, J. S. (2)**; *Cerithidea californica*, **Bright, D. B.**; Nematode infection of the heart of *Helisoma trivolvis*, **Chernin, Michelson et al**; The three hearts of the oyster, **Galtsoff, P. S.**; Heart and pericardium *Achatina fulica*, **Ghose, K. C. (2)**; Pace-maker mechanism of *Achatina fulica* heart, **Ghose, K. C. (3)**; *Anodonta cygnea* heart structure, **Jullien, Ripplinger, Cardot et al (5)**; Vascular system of *Neopilina*, **Lemche & Wingstrand**; Detailed vascular system of *Phyllaplysia*, **McCauley, J. E.**

Excretory and Secretory System.— Renal region of *Australorbis glabratus* and *A. nigricans*, **Barbosa and Coelho**; *Helix pomatia* kidney microscopic study of the cellular systems involved, **Bouillon, J. (1)**; Kidney of *Cerithidea californica*, **Bright, D. B.**; The salivary gland of *Neptunea antiqua*, **Fänge, R.**; Modifications of the excretory system in correlation with *Achatina fulica* habits, **Ghose, K. C. (1)**; Innervation of the anterior

salivary glands of *Sepia officinalis*, **Graziadei, P. (3)**; Pericardium and excretory system of Lake Ochrid Ancylidae, **Hubendick, B. (2)**; Structure of the Keber's organ in some lamellibranchs, **Kato, K.**; Venom duct and gland of *Conus*, **Kohn, Saunders & Wiener**; Renal organ of Olividae, **Marcus, Ev. & Er. (1)**; Poison gland of *Conus mediterraneus*, **Martoja, M.**; Mucous glands of oyster gills, **Nelson, T. C.**; Morphology of renal and rectal ridges of *Biomphalaria pfeifferi*, **Schutte & van Eeden.**

Respiratory System.—Ctenidium of *Cerithidea californica*, **Bright, D. B.**; Function and structure of bivalve gills, **Franc, A.**

Nervous System.—Muscle receptor organ under the nerves radiating from the stellate ganglion of *Eledone*, **Alexandrowicz, J. S. (1)**; General arrangement and detailed observations on the nervous system of *Sepia* hearts. **Alexandrowicz, J. S. (2)**; Nervous system and sense organs of *Cerithidea californica*, **Bright, D. B.**; Neurone cytoplasmic inclusions of *Pila globosa*, **Chatterjee, N.**; Visual shape discrimination by the octopus, **Deutsch, J. A.**; Relation of nervous system and sense organs to mode of life of land pulmonates, **Elwi Abd el Hamid, M.**; Polyplacophora, **Fischer-Piette & Franc (1)**; The main nerve ganglia and various modifications seen in bivalves, **Franc, A.**; *Ringicula buccinea*, **Fretter, V.**; Innervation of *Sepia* alimentary canal, **Graziadei, P. (2)**; Innervation of the anterior salivary glands of *Sepia*, **Graziadei, P. (3)**; The stellate ganglion cells of *Sepia officinalis*, **Graziadei, P. (4)**; Nervous supply to the arms and suckers of *Loligo vulgaris*, **Graziadei, P. (1), (5) and (7)**; Sucker innervation in sessile arm of *Loligo vulgaris*, **Graziadei, P. (6)**; Cell bodies in the central nervous system of *Strophocheilus rosaceus*, **Haeckel, W.**; Central nervous system of *Lymnaea stagnalis*, **Hekstra & Lever**; Detailed nervous system and sense organs of *Phyllaplysia*, **McCauley, J. E.**; Central nervous system of *Olivella*, *Oliva* and *Lintricula*, **Marcus, Ev. & Er. (1)**; Relationship of the osphradium and osphradial ganglion to the circumpharyngeal ganglionic complex of *Australorbis*, **Michelson, E. H. (2)**; Innervation of the oyser gill, **Nelson, T. C.**; Nervous systems of Mollusca including giant axon complexes of cephalopods, **Nicol, J. A. C. (3)**; Typical and atypical sense organs and nervous systems, **Portmann, A.**; *Diaphorodoris* Mediterranean forms, **Portmann & Sandmeier, (1)**; Innervation of ganglia at the base of the rhinophores of *Donice*, **Portmann & Sandmeier (2)**; Cytoplasmic passage in nerves of Pulmonates, significance and structure, **Quattrini, D. (1)**; Asymmetrical structure of parietal ganglia in *Papillifera bidens*, **Quattrini, D. (2)**; Nervous systems of British slugs, **Quick, H. E. (4)**; Pallial complex of *Meledella*, **Riedel, A. (1)**; Diagram (fig. 22) of principal ganglia of *Biomphalaria pfeifferi*, **Schutte & van Eeden**; *Bukobia kikuyuense* fig. **Urban, S.**; *Octopus*, Brain and optic glands, **Wells, M. J. (1)**; Stellate ganglia and associated nerves in *Octopus*, **Wilson, D. M.**

Reproductive System.—Egg masses of *Strombus* to show internal coils of eggs, **Abbott, R. T. (5)**; Heterocotyly in Ommastrephidae, **Adam, W. (2)**; Anatomy gross and microscopic of *Planorbis* and *Lymnaea* genitalia, **Alaphilippe & Regondaud**; Two symmetrical penes in *Helix aspersa*, **Alaphilippe, Regondaud & Tardy**; Genital system of *Yamatochlamys kiiensis* Azuam figured, **Azuma, M.**; Genitalia of intermediate hosts of *Schistosoma mansoni* in Brazil, **Barretto, A. C.**; *Bulimulus tenuissimus*, **Barros Araujo, J. L. de et al**; Genital systems of *Bosellia mimetica*, **Becker, R.**; Male and female *Cerithidea californica*, **Bright, D. B.**; Ovotestis of aquatic pulmonates, **Burch, J. B. (2)**; Active stages of gametogenesis in ovotestes of schistosome vector snails, **Burch, J. B. (3)**; Comparative histological study of the genital systems of the Hygrophila, **Duncan, C. J. (1)**; Genital systems of Hygrophila and their evolution, **Duncan, C. J. (2)**; Atypical spermatozoa, oocytes and degenerative phenomena in *Haminea navicula*, **Dupouy, J. (2)**; World species of *Aplysia*, **Eales, N. B. (3)**; *Vitrina (Semilimacella) bonelli reitteri*, *Aegopsis italicus*, *Daudebardia (D.) fischeri*, *D. (D.) brevipes* & *D. (D.) rufa* & figs., **Forcart, L. (6)**; *Ringicula buccinea*, **Fretter, V.**; Ovotestis of pulmonate Mollusca, **Gatenby, J. B.**; Genitalia of *Catinella* from Maryland and Michigan, pl. 1, **Grimm, F. W.**; Variations in the ovotestis of *Deroceras reticulatum*, **Henderson & Pelluet**; The reproductive system of '*Pettancylus*', figs. 7–10, **Hubendick, B. (1)**; Ancylidae from Lake Ochrid, **Hubendick, B. (2)**; *Laciniaria riloensis moravica*, *L. stabilis*, *L. turgida*, *L. biplicata*, *L. nitidosa*, figured, **Hudec, Ložek & Mácha**; *Pagodulina pagodula* fig'd., **Jackiewicz & Rafalski**; *Cypraea caputserpentis* ♂ and ♀ systems, **Kay, A.**; The hermaphrodite slug *Semperula maculata*, **Kenny & Inamdar**; *Phyllaplysia*, **McCauley, J. E.**; Reproductive organs of Olividae, **Marcus, Ev. & Er. (1)**; ♂ and ♀ *Olivella*, **Marcus, Ev. & Er. (2)**; of *Hydrobia* spp. from the littoral zone (France), **Marx, P. (2)**; The hermaphrodite gonad of *Placopecten magellanicus*, **Merrill & Burch**; A rapid method for preparing mounts of snail genitalia for anatomical study, **Michelson, E. H. (1)**; Diagrams of genitalia of Succineidae from Kansas, **Miles, C. D.**; *Drepanotrema surinamense*, **Paraense & Deslandes**; Genital organs of *Diaphorodoris*, **Portmann & Sandmeier (1)**; Dissection of the genital system of *Donice banyulensis* and its structure, **Portmann & Sandmeier (2)**; Gonads of *Placopecten* just before spawning, **Posgay & Norman**; The genital system of opisthobranchs compared with that of other gastropods, **Pruvot-Fol, A.**; Reproductive systems, spermatophores and mating of British slugs, **Quick, H. E. (4)**; Anatomy of the reproductive apparatus of *Meledella*, **Riedel, A. (1)**; Zonitidae from Bulgaria, **Riedel, A. (2)**; The genital system of *Mangelia brachystoma*, **Robinson, E.**; Reproductive anatomy of female *Oncomelania*, **Roth, A. A.**; Sexual maturity in *Oncomelania nosophora*, **Roth & Wagner (2)**; Morphology of the genital system of *Biomphalaria pfeifferi*, **Schutte & van Eeden**; Sperms of *Calyptraea sinensis*, **Streiff, W. (1)**; *Zaphysema* mature and immature specimens, **Turner, R. D. (2)**; *Bukobia kikuyuense* figs., **Urban, S.**; *Atoxon kiboense* sp. nov. and *A. taeniatum*, E. Africa, **Verdcourt, B. (1)**; of terrestrial Swedish gastropods with figs., **Walden, H. W.**; The ovary and its ducts in mature and immature *Octopus* before and after removal of the optic glands, **Wells, M. J. (1)**; Genitalia of *Boettgerilla vermiformis*, **Wiktor, A. (3)**; Penis of *Hipponix antiquatus*, **Yonge, C. M. (3)**; The hermaphrodite gonad of *Helix cincta*, **Zannini, A. M. (1).**

PHYSIOLOGY

General Studies.—Conditions required for ciliary activity of *Mytilus* gill, **Aiello, E. L.**; Polymorphism in *Cepaea nemoralis*, **Cain, King & Sheppard**; Breakdown of 3 : 5 : 3-triiodo-L-thyronine in the hepatopancreas of the mussel and octopus, **Covelli, Biasi & Tommaselli**; Peculiarities of physiology seen in bivalves, **Franc, A.**; Carbonic anhydrase influence on shell growth of *Physa*, **Freeman, J. A.**; Physiological and biochemical differences between diploid and polyploid *Melanoides tuberculatus*, **Jacob, J.**; Metabolism during anaerobiosis in *Mytilus galloprovincialis*, **Jitariu, M.**; Blockage of *Anodonta* heart rhythm by KCl, **Jullien, Cardot, Joly & Bride (2)**; The role of the ciliated epithelium of the locomotory organ

of Basommatophora, **Kaiser, P.**; Mobility of partially submersed shells and the effect of naturally bored holes on shell transport, **Kornicker & Armstrong**; Osmotic adjustment and regulation by molluscs, **Nicol, J. A. C. (3)**; Colour and ink of *Argonauta argo*, **Young, J. Z. (4)**; Metabolism of *Littorina* spp. in and out of water, **Zieg, R. G.**

Nervous System.—Functioning of the muscle receptor organ of *Eledone*, **Alexandrowicz, J. S. (1)**; Chemical studies on respiration of satellite cells of *Loligo* giant nerve fibres, **Coelho, Goodman & Bowers**; *Loligo* and *Dosidicus*, chemical investigation of giant nerve fibres, **Deffner & Hafter**; Phosphomonoesterases in the central ganglia of *Helix*, **Domján & Minker**; Control of *Aplysia* heart activity, **Gersch & Deuse**; Pace-maker mechnism in *Achatina* heart, **Ghose, K. C. (3)**; Reflex actions of suckers on sessile arms of *Loligo*, **Graziadei, P. (7)**; Nervous co-ordination of cardiac and respiratory movements in *Helix pomatia*, **Jullien, Ripplinger, Joly et al (4)**; Electrophysiological investigations of *Ommatostrephes* giant axon, **Lev, Nicolsky et al**; Electrical responses of the retinal nerve and optic ganglion of the squid, **MacNichol & Love**; Extra cardial nervous influence on *Helix* heart, **Meng, K. (2)**; Neuro secretion in cerebral ganglia of *Arion*, **Mol, J-J. van**; Neuro secretion in Gastropoda both Gomori and paraldehyde-fuschin negative, **Quattrini, D. (3)**; Physical properties of squid giant axon, **Solomon & Tobias**; Nervous control of *Mytilus* muscle, **Takahashi, K.**; Acetyl choline and synaptic transmission in *Aplysia*, **Tauc & Gerschenfeld (1)**; Inhibition and excitation of snail neurone, **Tauc & Gerschenfeld (2)**; Intrinsic and extrinsic ganglion cell activity in *Aplysia*, **Tauc, L. (1)**; Origin and propagation of the efferent potential in giant neurone of *Aplysia*, **Tauc, L. (2)**; Synaptic transmission in the giant nerve fibres of *Aplysia* in the absence of or without somatic activation, **Tauc, L. (3)**; Equivalent pore radius in the axolemma of the giant axon of the squid, **Villegas & Barnola**; Proprioception and visual discrimination of orientation in *Octopus*, **Wells, M. J. (2)**; Nervous control of movement in cephalopods, **Wilson, D. M.**; Learning in operated and non-operated *Octopus*, **Young, J. Z. (2)**; Memory in *Octopus*, **Young, J. Z. (3)**.

Sense Organs.—Sensory systems involved in swimming and walking by *Octopus*, **Boycott, B. B.**; Chemo-reception by the osphradium of *Bullia laevissima*, **Brown & Noble**; Behavioural properties used by an octopus during shape discrimination, **Deutsch, J. A.**; Shape discrimination theories for *Octopus*, **Deutsch & Sutherland**; Movements of ^{24}Na and ^{42}K in the squid retina, **Hagins & Adams**; Light-induced current from the receptors of the squid retina, **Hagins, Adams & Wagner**; Hearing and the octopus statocyst, **Hubbard, S. J.**; Orientation of the retina of *Octopus* after removal of statocysts, **Wells, M. J. (2)**; Formation of representations in the memory of *Octopus*, **Young, J. Z. (3)**.

Muscular System.—Pacemaker mechanism and refilling of *Achatina* auricle, **Ghose, K. C. (3)**; Relaxation and contraction patterns induced in the adductor muscle of the clam, **Kawaguti & Ikemoto (2)**; Composition of the foot muscle in *Viviparus fasciatus*, **Kiecol & Michejda**; Membrane potentials of the anterior byssus retractor of *Mytilus*, **Paul, D. H.**; Movements of the muscular pallial septum in *Brechites penis*, **Purchon, R. D. (1)**; Preparation of inosinic acid from squid mantle muscle, **Saito, Matsuyoshi et al**; Aerobic glycolysis of molluscan muscle, **Shibata & Yoshimura**; Nervous control of the anterior byssus retractor of *Mytilus*, **Takahashi, K.**; Cytochromes of muscles of marine molluscs, **Tappel, A. L.**; Responses of mantle muscle to stimulation of the stellar nerves of *Octopus*, **Wilson, D. M.**

Circulatory System.—Influence of water salinity on osmotic concentration of *Theodoxus* haemolymph, **Bielawski, J.**; Marine molluscan heart physiology, **Buddenbrock, E. v.**; Oyster circulatory system, **Galtsoff, P. S.**; *Aplysia* heart activity, **Gersch & Deuse**; Pacemaker mechanism and refilling of the auricle in *Achatina*, **Ghose, K. C. (3)**; Biochemical characterization of blood pigments, **Gratzer & Allison**; Decrease of copper bands in *Helix* haemocyanin, **Heirwegh & Lontie**; Blockage of *Anodonta* heart action by external application of chemicals *in situ*, **Jullien, Acolat, Cardot, Joly & Bride**; Fructose consumption by isolated heart of *Helix pomatia*, **Jullien & Cardot**; Experimental heart physiology of *Anodonta*, **Jullien, Cardot, Joly & Bride (1)**; *Anodonta* heart rhythm effect of KCl, **Jullien, Cardot, Joly & Bride (2)**; Factors determining the cardiac rhythm of the snail heart, **Jullien, Ripplinger, Joly et al (1)**; Role and importance of Ca in maintaining *Helix* heart rhythm, **Jullien, Ripplinger, Joly et al (2)**; Isolated heart experiments with *Helix pomatia*, **Jullien, Ripplinger, Joly et al (3)**; Nervous co-ordination of cardiac and respiratory movements in *Helix pomatia*, **Jullien, Ripplinger, Joly et al (4)**; *Helix pomatia* heart inhibition, **Jullien, Ripplinger, Cardot et al (6)**; *Helix pomatia*, action of choline esters on isolated heart ventricle, **Megemont, Dastugue & Bastide**; *Helix* effect of acetylcholine on isolated heart compared with effect on *Hirudo* dorsal musculature, **Megemont, Dastugue et al**; Studies on the control of *Helix pomatia* heart activity, **Meng, K. (1)**; Influence of extracardial nerves on heart activity in *Helix*, **Meng, K. (2)**; Osmotic concentration of the blood of *Theodoxus*, **Neumann, D. (1)**; Heart frequencies, circulatory systems and their variations, **Nicol, J. A. C. (3)**; Action of various ionic solutions on myocardial respiration of *Helix*, **Ripplinger & Hérold (1)**; Effect of Na+, K+ and Ca++ on *Helix* myocardial respiration, **Ripplinger & Hérold (2)**; Absorption and relationships of ions in isolated *Helix pomatia* heart, **Ripplinger, Joly & Cardot (1)**; Heart physiology of *Helix pomatia*, **Ripplinger, Joly & Cardot (2)**; No loss of heart rhythm in isolated *Helix pomatia* heart when immersed in Ringer's solution, **Ripplinger, Joly & Cardot (3)**; Haemolymph analysis using the ' daphnian ' test, **Vatovec & Timet.**

Respiration.—Effect of veratrine on azide depressed respiration of *Mytilus* gill, **Aiello, E. L.**; Oxygen consumption by *Anodonta cyred*, **Aliev, A. (2)**; O_2 consumption in *Nassarius* and changes in magnetic activity, **Barnwell, F. H.**; Critical oxygen tension and respiration of *Theodoxus* in different media, **Bielawski, J.**; Oxygen consumption of bivalve prey of *Urosalpinx*, **Blake, J. W.**; Measurements and records of oyster pumping rates, **Collier, A.**; Effect of temperature on respiration of *Arianta arbustorum*, **Gromadska & Przybylska**; Metabolism during anaerobiosis in *Mytilus galloprovincialis*, **Jitariu, M.**; Relationship between rate of water transport and oxygen consumption in lamellibranchs, **Jorgensen, C. B.**; Relationship between body size and respiration in *Mytilus*, **Krüger, F.**; Haemoglobin as the respiratory pigment of *Arca*, **Lubet, M.**; Function of haemocyanin as the molluscan blood respiratory pigment, **Nicol, J. A. C. (3)**; Ionic composition of the respiratory tissues of *Anodonta*, **Pora, Rusdea, Stoicovici et al**; Action of mono-, bi- and tricationic solutions on myocardium respiration, **Ripplinger & Hérold (1)**; Myocardial respiration of *Helix pomatia* and the action of Na+K+ & Ca++, **Ripplinger & Hérold (2)**; Oxygen consumption of

Teredo navalis in differing salinity conditions, **Soldatova & Turpaeva**; Respiration of *Argonauta argo*, **Young, J. Z. (4).**

Alimentation.—Histoenzymological data on *Octopus*, **Arvy, L. (1)**; Histo-enzymology of *Octopus* alimentary canal, **Arvy, L. (2)**; Mucoid comprising substance of *Pinna* crystalline style, **Bailey & Worboys**; Lipase activity of *Helix* intestinal epithelium, **Ferreri, E.**; Cytochrome-like haemoproteins in gut fluids of *Euhadra* and *Hiriopsis*, **Kawai, K. (1)**; Digestive gland and enzymes, absorption and ciliary feeding in Mollusca, **Morton, J. E. (1)**; Dietary relationships of pigmentation in a marine snail, **Nadakal, A. M.**; Structure and mode of functioning of the Eulamellibranch stomach, **Purchon, R. D. (2)**; Protease and amylase production in *Achatina* mid-gut region, **Smith & Weel**; Enzyme activity in cuttlefish digestion, **Takahashi, T. (1).**

Reproductive System.—*Ostrea puelchana* and *O. spreta*, **Ageitos de Castellanos & Cabrera**; Cross- and self-fertilization in *Australorbis glabratus*, **Azevedo & Pequito**; Nurse cells of the ovotestis of *Australorbis glabratus*, **Barth, R.**; Seasonal changes in the gonads of *Cardium edule*, **Creek, G. A.**; Molluscan reproduction studied at "Ria de Vigo", **Figueras, A. (1)**; Spermiogenesis and the biology of fertilization, **Franzén, Å.**; Reproductive tissues of *Helix aspersa* not affected by partial gonadectomy, **Goddard, C. K. (1)**; Egg laying in cerebral-ectomized snails, **Hekstra & Lever**; Percentages of development after artificial cross- and self-fertilization in *Laternula japonica*, **Kagawa, Y.**; Reproduction of Littorinidae in Japan, **Kojima, Y.**; Study on the reproduction and self-fertilization of *Achatina*, **Larambergue, M. de**; Reproduction of *Archachatina*, **Larambergue & Alaphilippe**; Fecundity of *Australorbis glabratus* and the effect of NaPCP, **Olivier & Haskins**; Functioning of the opisthobranch genital system, fertilisation and nomenclature used for description of the various parts, **Pruvot-Fol, A.**; Numbers of sperm in the bursa copulatrix and the seminal receptacle of *Oncomelania*, **Roth, A. A.**; Development of sexual maturity in *Oncomelania nosophora*, **Roth & Wagner (2)**; Reproductive cycle of *Dreissena polymorpha*, **Vlastov & Kochanova** *in* **Zhadin, V. I. et al.**; Protandry and self-fertilization in Calyptraeidae, **Wyatt, H. V. (2).**

Excretion and Secretion.—Butyrylthiocholinesterase activity in *Octopus* salivary gland, **Arvy, L. (1)**; Salivary poison of *Neptunea arthritica* **Asano & Itoh**; Elimination of calcium in *Australorbis glabratus* studied by means of ^{45}Ca, **Azevedo, Gil, Barreira & Gomes**; Kidney mechanism in *Helix pomatia*, **Bouillon, J. (1)**; The digestive and hypobranchial glands of *Rissoa parva*, **Gostan, G.**; Secretions of *Octopus* salivary glands, **Hartman, Clark et al.**; Excretion of Keber's organ in some lamellibranchs, **Kato, K.**; Osmoregulation by *Theodoxus fluviatilis*, **Neumann, D. (1)**; Ammontelism in Mollusca, **Nicol, J. A. C. (3)**; Fluid acid secretion from the skin of British marine gastropods, **Thompson, T. E. (1)**; Acid and mucus secretions produced by Opisthobranchia, **Thompson, T. E. (5)**; Hypobranchial glands of marine Muricidae, **Whittaker, V. P.**

Toxins.—Seasonal variation in the toxicity of *Neptunea* salivary poison, **Asano & Itoh**; Rapid and reversible block of electrical activity by clam poison, **Dettbarn et al.**; Toxicity of *Octopus* saliva to Crustacea, **Ghiretti, F.**; Toxicity of *Conus* venom on crabs and fishes, **Kohn, Saunders & Wiener**; Pharmacological study of poisons of shell fish, **Murtha, E. F.**; Inhibitory effect of mussel extract on rat brain and intercostal muscle, **Pepler & Loubser**; Paralytic shell fish poisons, **Schantz, E. J.**

Regeneration and Transplantation.—Removal of one or both statocysts and bilateral optic nerve section in *Octopus*, **Boycott, B. B.**; Reimplantation of ganglia after extirpation in *Lymnaea*, **Hekstra & Lever**; Regeneration in the Octopus, **Kumpf, H. E.**; Effects of atmospheric oxygen concentrations on cell differentiation in the regenerate of the snail, **Pande, B. P.**; Removal of the vertical lobes of *Octopus* and failure of discrimination learning, **Young, J. Z. (2).**

Reaction to Radiation.—Effect on early cleavage stages of *Ilyanassa obsoleta*, **Cather, J. N.**; Autoradiography to show uptake of $Ca^{45}Cl_2$ by *Anodonta*, **Nair, K. K.**

Experimental Studies.—Use of ^{45}Ca to study Ca^{++} excretion in the skin of *Australorbis glabratus*, **Azevedo, Gil, Barreira & Gomes**; Susceptibility of *Australorbis glabratus* to laboratory infections of *Schistosoma*, **Barbosa & Barreto**; Respiration of *Theodoxus fluviatilis* in different media, **Bielawski, J.**; Chemotactic responses of *Urosalpinx* to bivalve prey, **Blake, J. W.**; Movement after statocyst removal in *Octopus*, **Boycott, B. B.**; Effect of serotonin on motor activity of nudibranch embryos, **Buznikov & Madukhin**; Microbiology of the Pacific oyster, **Colwell & Liston**; Differences in succinic dehydrogenase activity in *Viviparus* spp., **Czapska, M.**; Histochemical study of *Murex* spermatozoa, **Dupouy, J. (1)**; Lethal high temperature for *Littorina littorea*, **Fraenkel, G.**; Effect of copper, dissolved in sea water, on oyster beds, **Fujiya, M. (3)**; Trace analysis of marine molluscs, **Fukai & Meinke**; Analysis of cephalotoxin from the posterior salivary gland of *Octopus vulgaris*, **Ghiretti, F.**; Survival of *Biomphalaria* at different depths in Lake Kivu, **Gillet, Brauaux & Wolfs**; I^{131} accumulation in *Dreissensia polymorpha*, **Glaser, R.**; Physiological saline suitable for tissues of *Helix aspersa*, **Goddard, C. K. (2)**; Water currents and orientation in nudibranchs, **Haaften & Verwey**; *Crassostrea virginica* CO_2 fixation pathways, **Hammen & Wilbur**; Effect of visible light on the ovotestis of *Deroceras reticulatum*, **Henderson & Pelluet**; Effect of cold on *Helix aspersa* growth, **Herzberg, F. & A.**; Uptake of Ru^{106} by *Mytilus edulis*, **Jones, R. F.**; Effect of external application of chemicals on heart action of *Anodonta cygnea*, **Jullien, Acolat, Cardot, Joly & Bride**; *Anodonta cygnea* experiments on heart, **Jullien, Ripplinger, Cardot et al. (5)**; Cytochrome 556 and electron-transport system in *Euhadra* hepatopancreas, **Kawai, K. (2)**; Immobilization reaction of *Mytilus* gill cilia placed in antigill serum, **Koizumi, S.**; Use of molluscs for 5-hydroxytryptamine determinations, **Kottegoda, S. R.**; Effects of nicotinamide on *Spisula* eggs, **Krane & Crane**; "Water rigour" as an aid when operating on marine gastropods, **Krijgsman & Brown**; Use of chemicals to control shellfish predators, **Loosanoff, Mackenzie et al.**; Chemical experiments on *Mytilus galloprovincialis*, **Magri, E.**; Flow birefringence properties of scallop myosin A and B, **Maruyama & Kominz**; Action of various choline esters on the isolated heart of *Helix pomatia*, **Megemont, Dastuque & Bastide**; Differences in effect of acetylcholine on isolated *Helix* heart and dorsal musculature of *Hirudo*, **Megemont, Dastuque et al.**; Effect of shell fish poisons on anaesthetized cats, **Murtha, E. F.**; Effect of RNA on uptake of $Ca^{45}Cl_2$ by *Anodonta cygnaea* mantle, **Nair, K. K.**; Effect of ribonuclease on shell regeneration in *Ariophanta*, **Nair & Muthe**; Osmotic resistance in *Theodoxus fluviatilis*, **Neumann, D. (1)**; Experimental study of shell colour patterns of *Theodoxus fluviatilis*, **Neumann, D. (2)**; Spectrographic analysis of plankton, **Nicholls, Curl & Bowen**; Extraction and separation of pigments of molluscs, **Nishibori, K.**; Effect of low concentrations of NaPCP on egg viability and fecundity of *Australorbis glabratus*, **Olivier & Haskins**; Gas composi-

tion in the float of *Janthina janthina*, **Oppenheimer & McFarland**; Lipids of marine invertebrates, **Rapport & Alonzo**; Effect of Na+, K+ and Ca++ on *Helix* myocardial respiration, **Ripplinger & Herold (2)**; Anaesthetism of *Helix pomatia*, **Ripplinger & Joly**; Fixation of iodine by *Mytilus galloprovincialis*, **Roche, André & Covelli**; On isolated hearts of *Helix aspersa*, **Stolkowski, Reinberg & Blanc-Dingeon**; Electron transport in eggs, embryos, and adult *Spisula* tissues, **Strittmatter, C. F. & P. & Burdick**; Cytochromes of muscles of marine invertebrates, **Tappel, A. L.**; Response of *Aplysia* neurones to local injections of acetylcholine, **Tauc & Gerschenfeld (1)**; Removal of injected microorganisms from *Crassostrea virginica*, **Tripp, M. R.**; Failure of experimentally induced *Pecten* gametes to develop normally, **Turner & Hank**; Tissue culture in vitro of *Ostrea* and *Gryphaea*, **Vago & Chastang**; Effects of statocyst removal upon movement and posture in the *Octopus*, **Wells, M. J. (2)**; Force exerted by a single cilium of *Mytilus edulis*, **Yoneda, M.**

Chemistry.—Ionic composition of squid photoreceptors, **Adams & Hagins**; Activation of *Mytilus* lateral gill cilia by potassium-veratrine mixtures, **Aiello, E. L.**; Manganese deposition on the shells of living molluscs, **Allen, J. A. (1)**; Metabolism of sulphur amino-acids in *Mytilus* and *Rangia*, **Allen & Awapara**; of *Tapes pullastra* from Ría de Vigo, Cesantes beach, **Álvarez-Seoane, G.**; Histoenzymological data on the digestive tract of *Octopus*, **Arvy, L. (1)**; Oxidases and esterases in the cephalopod alimentary canal, **Arvy, L. (2)**; The salivary poison of *Neptunea arthritica*, **Asano & Itoh**; Mucoid comprising substance of *Pinna* crystalline style, **Bailey & Worboys**; Availability of calcium in oyster shells when eaten by Philippine natives, **Bersamin, Gonzalez & Sulit**; Changes in nuclear histones during early development of *Helix aspersa*, **Bloch & Hew (1)**; Purin globules in the white body of *Octopus vulgaris*, **Bolognari, A. (4)**; Cholinesterase in embryogenesis of nudibranchiates, **Buznikov, G. A.**; The effect of serotonin on nudibranch embryo locomotory organs, **Buznikov & Madukhin**; Localization of phosphorus compounds in *Ilyanassa* egg, **Collier, J. R. (1)**; Localization of ribonucleic acid in *Ilyanassa* egg, **Collier, J. R. (2)**; β-glucuronidase and arylsulphatase activity in molluscs, **Corner, Leon & Bulbrook**; Succinic acid dehydrogenase in *Viviparus* tissues, **Czapska, M.**; Chemical investigation of giant nerve fibres of *Loligo* and *Dosidicus*, **Deffner & Hafter**; Study of phosphomonoesterases in central ganglia of *Helix*, **Domján & Minker**; Lipids of *Murex* atypical spermatozoa, **Dupouy, J. (1)**; Effect of sewage effluent on calcium carbonate deposition on snail shells, **Edwards & Heywood**; Transmethylation in *Anodonta cygnea*, **Ericson, L-E.**; Choline and its derivatives in *Patella* tissues, **Etienne, J.**; Phosphatidylcholines of *Patella vulgata*, **Etienne & Kahane**; Sterol biosynthesis in molluscs, **Fagerlund & Idler**; Study of the salivary gland of *Neptunea antiqua*, **Fänge, R.**; Lipase activity of *Helix* intestinal epithelium, **Ferreri, E.**; Colorimetric determination of glycogen in marine molluscs, **Fraga, F. (1)**; Relation between weight, size and chemical composition of *Mytilus*, **Fraga, F. (2)**; Quantitative determination of oligosaccharide in *Mytilus*, **Fraga, F. (3)**; Seasonal variation in the chemical content of mussels, **Fraga, F. (4)**; Histochemical determination of proteins in *Mytilus edulis*, **Fraga & Lopez-Capont**; Effects of industrial waste in relation to distribution of dehydrogenase activity in the oyster, **Fujiya, M. (1)**; Incorporation of radioactive calcium dissolved in sea water (approx. 10 μc/L.) in the shells of Japanese clams, **Fujiya, M. (2)**; Activation analysis and conventional methods for determining trace elements in marine molluscs, **Fukai & Meinke**; Polarographically reducible substance in molluscan "meat", **Fukushima & Okada**; Incorporation of labelled iodine into the organs of *Dreissensia*, **Glaser, R.**; Polysaccharides of *Rissoa parva*, **Gostan, G.**; Blood pigments of Mollusca, **Gratzer & Allison**; Studies on the organic components of mother of pearl, **Grégoire, C.**; Histochemistry of *Helix pomatia* mantle, **Guardabassi & Piscenza**; ^{24}Na and ^{42}K in the squid retina, **Hagins & Adams**; Carbon dioxide fixation in *Crassostrea virginica*, **Hammen & Wilbur**; Pharmacologically active amines and their biogenesis in the octopus, **Hartman, Clark et al.**; Distribution of photodynamic substance in abalone viscera, **Hashimoto, Naito & Tsutsumi**; Effect of organic acids on Ca ion concentration in shell fish, **Horiguchi, Y. (1)**; Ion products in blood and tissue fluids of molluscs, **Horiguchi, Y. (2)**; Studies on the organic acids in shell fish tissues, **Horiguchi, Y. (3)**; ^{32}P study of *Pteria* phosphorus metabolism, **Horiguchi, Y. (4)**; Factors determining the automatic cardiac rhythm of the snail heart, **Jullien, Ripplinger, Joly et al. (1)**; Importance of calcium in maintenance of snail cardiac rhythm, **Jullien, Ripplinger, Joly et al. (2)**; Effect of chemical solutions on the isolated heart of *Helix pomatia*, **Jullien, Ripplinger, Joly et al. (3)**; Alkaline substances as inhibitors of the heart when introduced into the pulmonary cavity, **Jullien, Ripplinger, Cardot et al. (6)**; Phosphatase activities in tissues of marine bivalves and inhibition of shell formation by certain drugs, **Kado, Y.**; pH of water and abundance frequency of *Galba*, **Kaštàk, V.**; Glycerol and adenosinetriphosphate induced adductor muscle patterns, **Kawaguti & Ikemoto (2)**; Cytochrome-like haemoproteins in gut fluids of *Euhadra* and *Hiriopsis*, **Kawai, K. (1)**; Cytochrome 556 and electron-transport system in *Euhadra* hepatopancreas, **Kawai, K. (2)**; Quantitative analysis of NH-positive substances in the foot muscle of *Viviparus fasciatus*, **Kiecol & Michejda**; Calcium and electric potential across the clam mantle, **Kirschner, Sorenson et al.**; Cytochemical studies on the second gradient axis of fertilized oyster eggs, **Kobayashi, H.**; Venom of the marine *Conus*, **Kohn, Saunders & Wiener**; Effect of nicotinamide on pyridine nucleotide levels in *Spisula* eggs, **Krane & Crane**; Strontium, magnesium and aragonite percentages in gastropod shells, **Krinsley, D.**; Amylase secretion in the molluscan crystalline style, **Kubomura, K.**; of molluscs in the Vigo Bay area, **López-Benito, M. (1)**; Analysis of *Pecten jacobeus* to determine water, fat and protein content, **López-Benito, M. (2)**; Polysaccharides of aquatic snails, **McMahon, Brand & Nolan**; The derivation of the "osmiophil bodies" [Golgi] in the development of *Lymnaea stagnalis*, **Malhotra, S. K.**; of molluscan shells, **Manigault, P.**; Different staining reactions obtained in a study of the poison gland of *Conus*, **Martoja, M.**; Endocrinology and cerebral ganglia of *Arion* **Mol, J. J. van**: Gut functions in ciliary feeders, **Morton, J. E. (1)**; Carotenoids and chlorophyllic pigments in *Cerithidea*, **Nadakal, A. M.**; $Ca^{45}C_{l_2}$ uptake by *Anodonta cygnaea* mantle edge, **Nair, K. K.**; Staining characteristics of glandular cells in *Pholas* light organ, **Nicol, J. A. C. (1)**; Carotenoids and pigments in Mollusca, **Nicol, J. A. C. (3)**; Carotenoids of *Anadara* and aplysiopurpurin of *Aplysia*, **Nishibori, K.**; Gas content of bubbles from the float of *Janthina janthina*, **Oppenheimer & McFarland**; Mode of action of the alkaloid in mussel poisoning, **Pepler & Loubser**; Modification of the ionic content of *Anodonta* tissues, **Pora, Rusdea, Stoicovici et al.**; Passage of cytoplasmic material in nerve nuclei as sites of intense proteic metabolism, **Quattrini, D. (1)**; Structure of plasmalogens, **Rapport & Alonzo**; Respiration of *Helix* myocardium under the influence of Na+, K+, & Ca++, **Ripplinger & Herold (2)**; Ionic composition, strength

and absorption by *Helix pomatia* isolated heart, **Ripplinger, Joly & Cardot (1)**; Ionic content of myocardium haemolymph of *Helix*, **Ripplinger, Joly & Cardot (2)**; " Demineralization " without loss of rhythm in isolated *Helix pomatia* heart, **Ripplinger, Joly & Cardot (3)**; *Mytilus galloprovincialis* fixation of iodine, **Roche, André & Covelli**; Inosinic acid derived from squid muscle using 5-adenylate deaminase of fish muscle, **Saito, Matsuyoshi et al.**; Bioassay of paralytic shell fish poisons, **Schantz, E. J.**; Lactic dehydrogenase activity in squid mantle muscle, **Shibata & Yoshimura**; Organic matrix of *Cardium edule* shell, **Simkiss, K.**; Enzyme changes in the mid gut of *Achatina* as it grows older, **Smith & Weel**; Thixotropy of squid giant fibre axoplasm, **Solomon & Tobias**; Amylase and esterase activity in *Ommastrephes* viscera, **Takahashi, T. (1)**; Seasonal variations in chemical composition of the liver and viscera of the cuttle-fish, **Takahashi, T. (2)**; Biogenesis of octopine in *Pecten* tissues, **Thoai & Robin**; Predominance of sulphate ions in defensive acid secretion of cowries, **Thompson, T. E. (1)**; pH estimations of acids secreted by marine gastropods, **Thompson, T. E. (2)**; Calcium-magnesium content of Lake Iznik and its effect on the molluscan fauna, **Traut, W.**; Methods adopted by oysters for removing microorganisms, **Tripp, M. R.**; Mg, Sr and Ba concentrations and calcium-aragonite ratios of recent molluscan shells, **Turekian & Armstrong**; Hormonal control of sexual maturity in *Octopus* by the optic glands, **Wells, M. J. (1)**; Isolation of uridine diphosphate-glycosyl compounds from the slug, **Wheat, R. W.**; Choline esters in marine gastropods, **Whittaker, V. P.**; Tests for chitin in *Aplysia* and *Bulla*, **Winkler, L. R.**; Phosphatides of molluscs, **Zama, Hatano et al.**

DEVELOPMENT, EVOLUTION AND GENETICS

Oogenesis and Oology.—Development of Gastropoda, **Anon (26)**; Of *Helix aspersa*, **Bloch & Hew (1)**; Yolk globules in oocytes of *Haliotis*, **Bolognari, A. (1)**; Nuclear apparatus during early egg development, **Bolognari, A., (3)**; Ovocyte nucleoli and growth in *Mytilus* and *Patella*, **Bolognari A., (5)**; Yolk formation in *Aplysia* and *Patella* oocytes, **Bolognari, A., (6)**; Golgi zones and bodies in oocytes of *Aplysia*, **Bolognari, O.**; Development of *Bithynia*, *Planorbis* and *Ancylus* eggs, **Cassará, A.**; Effect of X-rays on early cleavage stages of *Ilyanassa*, **Cather, J. N.**; Effect of streptomycin on hatching of *Australorbis* eggs, **Chernin & Schork**; Eggs and young of *Calliostoma zizyphinum* figured and described, **Clench & Turner, (1)**; Fertilization and cleavage in *Cardium edule*, **Creek, G. A.**; Effect of materials producing turbidity on clam egg development, **Davis, H. C.**; Oviposition initiation and egg production in fresh-water snails. **Dewitt & Sloan**; Atypical and abortive oocytes of *Haminea navicula*, **Dupouy, J. (2)**; Are the fossils *Paleodictyon* really gastropod eggs? **Fischer, P. H. (6)**; Egg membranes of Polyplacophora, **Fischer-Piette & Franc (1)**; Origin and development of *Achatina fulica* mesoderm, **Ghose, K. C. (4)**; Egg masses and egg capsules of Japanese marine prosobranchs, **Habe, T. (2)**; Egg masses and their development of Japanese opisthobranchs, **Hamatani, I. (1)**; Of Japanese opisthobranch egg ribbons, home reared, **Hamatani, I. (2)**; Oogenesis in parthenogenetic species of *Melanoides*, **Jacob, J.**; Egg masses of *Tamanovalva limax*, **Kawaguti & Yamasu (2)**; Egg deposition and development of *Cypraea caputserpentis*, **Kay, A.**; Second gradient axis of fertilised oyster egg, **Kobayashi, H.**; Egg capsules of *Nodilittorina granularis*, **Kojima, Y.**; Cleavage rates of *Spisula* eggs incubated with nicotinamide, **Krane & Crane**; An investigation to determine whether the " Golgi apparatus " of *Lymnaea stagnalis* is directly derived from similar objects already present in the egg, **Malhotra, S. K.**; Egg capsule, structure and development of *Olivella* eggs, **Marcus Ev. & Er. (2)**; Eggs of *Ostrea* and *Gryphaea*, **Marteil, L.**; Isolated blastomeres of *Lymnaea palustris*, **Morrill & Gottesman**; Eggs of *Sepia officinalis*, **Müller, C. D.**; Effect of low concentrations of NaPCP on egg viability of *Australorbis glabratus*, **Olivier & Haskins**; Blastokinensis and yolk structure in cephalopod eggs, **Orelli, M. v.**; Significance of metachromatic inclusions in unsegmented *Barnea* eggs, **Pasteels & Mulnard**; Ribonucleic acid during the development of *Pila virens*, **Ramamoorthi, K. (3)**; Cleavage of eggs and aster-associated particles, **Rebhun, L. I.**; Gastrulation and early development of *Rhodope veranii*, **Riedl, R.**; Production of eggs in *Oncomelania nosophora* and *O. formosana*, **Roth & Wagner, (1)**; Maturation division of eggs in *Mactra*, extensibility of the surface membrane, **Sawada, N.**; Nucleolar structure in oocytes of *Helix* and *Cepaea*, **Serra, J. A.**; First to third day development of *Neomenia*, **Thompson T. E. (3)**; Embryos and eggs of Calyptraeidae, **Wyatt, H. V. (2)**; Oogonia and growing oocytes in the hermaphrodite gonad of *Helix*, **Zannini, A. M. (3)**;

Embryology and Embryonic Stages.— *Ostrea puelchana* and *O. spreta* early embryology, **Ageitos de Castellanos & Cabrera**; Changes in nuclear histones during fertilization and embryonic development of *Helix aspersa*, **Bloch & Hew (1)**; Cholinesterase in embryogenesis of nudibranchiates, **Buznikov, G. A.**; Ciliary beating of embryonic locomotor organs in nudibranchs and the effect of serotonin, **Buznikov & Madukhin**; Embryology and development of shipworms, **Carpine, C.**; Embryonic development of *Ilyanassa* after removal of the mesentoblast cell, (4d), **Clement, A. C.**; Localization of phosphorous compounds in *Ilyanassa* egg, **Collier, J. R. (1)**; Localization of ribonucleic acid in *Ilyanassa* egg, **Collier, J. R. (2)**; Gastropod embryology, **Cox, L. R. (3)**; Pinocytosis in the developing egg of *Lymnaea stagnalis*, **Elbers & Bluemink**; Scaphopod embryology, **Fantinet, D.**; In *Achatina* the mesoderm mother cell 4d arises from 3D not 4D as supposed, **Ghose, K. C. (4)**; Development of *Polycera quadrilineata*, **Haefelfinger, H-R. (3)**; Metamorphosis and veliger development of *Cypraea*, **Kay, A.**; Cytochemical studies of fertilized oyster eggs, **Kobayashi, H.**; Shell gland cells of *Lymnaea ollula* 6 days after fertilization, **Kubota, T.**; Gametogenesis of *Ostrea edulis* and *Gryphaea angulata*, **Marteil, L.**; Of *Pila virens*, **Ramamoorthi, K. (1)**; Localization of RNA during the development of *Pila virens*, **Ramamoorthi, K. (3)**; Studies of maturation division of *Mactra* eggs, **Sawada, N.**; Separation and isolation techniques for *Spisula* embryo cells, **Strittmatter, C. F. & P.**; First stages in the development of the hermaphroditic gonad of *Helix cincta*, **Zannini, A. M. (1)**; Developmental phases of the hermaphrodite gonad of *Helix*, **Zannini, A. M. (3)**;

Spermatogenesis.—Changes shown by staining techniques in the Golgi body during the spermatogenesis of *Australorbis*, **Barth & Jansen (1)**; Spermatogenesis in *Australorbis glabratus olivaceus*, **Barth & Jansen (2)**; Of *Helix aspersa*, **Bloch & Hew (1)**; Schedule of spermatogenesis in *Helix aspersa* with reference to histone transition, **Bloch & Hew (2)**; Chromosome cycle during spermatogenesis in aquatic pulmonates, **Burch, J. B. (2)**; Chromosomes in spermatogenesis of *Physa gyrina*, **Burch & Bush**; Atypical spermatozoa of *Haminea navicula*, **Dupouy, J. (2)**; Spermiogenesis, phylogeny and the biology of fertilization, **Franzén, Å.**; Gametogenesis of pulmonate molluscs, **Gatenby, J. B.**; Spermatogenesis of *Melania crenulata* and *Paludomus tanschaurica* sex chromosomes identified, **Jacob, J.**; Structure and

development of sperm in hermaphrodite *Placopecten*, **Merrill & Burch**; Atypical spermiogenesis in *Calyptraea*, **Streiff, W** (1); A nucleoligene chromosome in the primary spermatocyte of *Calyptraea*, **Streiff, W.** (3); Relation between nutritive cells and developing spermatids in *Cipangopaludina malleata*, **Yasuzumi, Tanaka & Tezuka.**

Larval Stages.—Hatching of *Australorbis glabratus* eggs, **Azevedo, Costa Faro & Pequito**; Influence of climate on hatching of *Cochlicella*, **Boulangé & Hoestlandt**; Cholinesterase activity in early development of nudibranchiates, **Buznikov, G. A.**; Effects of streptomycin on hatching of snail eggs, **Chernin & Schork**; Pelagic gastropod larvae in the Black Sea, **Chukhchin, V. D.** (2); The veliger of *Cardium edule*, **Creek, G. A.**; Clam larvae development in various silt concentrations, **Davis, H. C.**; Male *Montacuta* maintained as a larval stage when commensal with *Phascolion*, **Deroux, G.**; Postembryonal development in *Helicodonta obvoluta*, **Frömming, E.** (2); Japanese opisthobranch veligers, **Hamatani, I.** (1); Veligers of Japanese opisthobranchs, **Hamatani, I.** (2); Oyster spat predation by *Panopeus*, **McDermott, J. J.**; Emergence, pelagic life and fixation of oyster larvae, **Marteil, L.**; Larval development and dispersion in Malaya, **Pathansali & Soong**; Molluscan larval types, **Portmann, A.**; Localization of RNA in veligers of *Pila virens*, **Ramamoorthi, K.** (3); Larval development and organogeny of *Rhodope veranii*, **Riedl, R.**; Larva of *Saxostrea echinata*, Q. and G. figs., **Tanaka, Y.**; Larval development, structures and behaviour of *Neomenia*, **Thompson, T. E.** (3); Planktonic, attached and bottom life of *Patinopecten yessoensis* larvae, **Yamamoto, G.**

Metamorphosis.—*Cardium edule* larva, **Creek, G. A.**; Development of the adductor muscle during metamorphosis of *Tamanovalva*, **Kawaguti & Yamasu** (1); *Schizoplax brandtii*, **Kussakin, O. G.**; Veligers of marine gastropods in Barbados, W. Indies, **Lewis, J. B.**; Hatching metamorphosis and a description of the veliger of *Olivella*, **Marcus, Ev. & Er** (2); *Rhodope veranii*, **Riedl, R.**; *Neomenia carinata* larvae, **Thompson, T. E.** (3); Metamorphosis from the viewpoint of animal phylogeny, **Uchida, T.**

Growth.—*Mytilus galloprovincialis* and *Patella coerulea*, **Bolognari, A.** (5); Growth of *Tapes decussatus*, *T. pullastra* and *Cardium edule* in Spain, **Figueras, A.** (1); Age determination and growth of *Margaritifera* in Sweden, **Hendelberg, J.**; Effect of cold on *Helix aspersa* growth, **Herzberg, F. & A.**; Rate of shell growth relative to body growth, **Kado, Y.**; Age, size and growth of spawning *Tamanovalva*, **Kawaguti & Yamasu** (2); Growth rate of *Mya arenaria* in a salt pond, **Matthiessen, G. C.** (1); Variation in length of *Eledone aldrovandi*, **Morales, E.** (3); Relative size of species of Desmoceratidae, **Obata, I.** (1); Growth and age determination studies on *Pinctada maxima*, **Sagara & Takemura**; Growth of *Teredo navalis* in varying salinity conditions. **Soldatova & Turpaeva**; Seasonal change in flesh weight/shell weight in *Tapes japonica* infested with *Pinnotheres*, **Sugiura, Sugita et al**; Seasonal variation in the ratio of weight of viscera to the body in the cuttle-fish, **Takahashi, T.** (2); Growth parameters of *Cardium corbis* Oregon to Alaska and estimated mean annual air temperatures, **Taylor, C. C.**; Size of endoceroid cephalopods, **Teichert & Kummel**; Correlation between shell length, locular index and sepioid race, **Yagi, T.**; Size of Permian bellerophontaceans. **Yochelson, E. L.** (2).

Life History and Sex Ratios.—Life histories of Australian marine prosobranch gastropods, **Anderson, D. T.**; Lamellibranch development, **Eberzin, A. G. [in Orlov]**; Gastropod ontogeny, **Fischer, P-H.** (1); Percentages of development after artificial self-and cross-fertilization in *Laternula japonica*, **Kagawa, Y.**; Lamellibranchs and gastropods, **Korobkov, I. A.** (3); Peculiar development of *Schizoplax brandtii*, **Kussakin, O. G.**; Hermaphroditism in *Placopecten magellanicus*, **Merrill & Burch**; Life history of *Aplysia punctata* Cuv. in Manx waters, **Miller, M. C.**; A study of *Eledone aldrovandi* giving a picture of larval forms and longevity over a 2-year period, **Morales, E.** (3); Sex differentiation in *Eledone cirrhosa*, **Morales & Bas** (1); Development of sexual maturity in *Oncomelania nosophora*, **Roth & Wagner**, (2); Sex diagnoses during the life history of *Dreissena polymorpha* and the reproductive cycle, **Vlastov & Kochanova** *in* **Zhadin, V. I. et al**; Changes in normal and precocious maturation of the ovary and ducts of *Octopus*, **Wells, M. J.** (1); Early life history of *Tapes variegata*, **Yoshida, H.**; Developmental phases of the hermaphrodite gonad of *Helix*, **Zannini, A. M.** (3).

Evolution.—Origin of the recent Indo-Pacific fauna of *Strombus*, **Abbott, R. T.** (5); The possible course of evolution of the ligament in the Lucinacea, **Allen, J. A.** (3); Evolution and ontogeny within the Mesozoic Ammonoidea, **Arkell, Kummel & Wright (in Moore)**; Natural selection divergent effects on *Cepaea*, **Clarke, B.**; Gastropod evolution, **Cox, L. R.** (6); Bivalve taxa and the fossil record, **Cox, L. R.** (9); Of the hinge structure in fossil bivalves, **Dechaseaux, C.**; Origin of the Pteriidae, **Dickins, J. M.** (2); Evolution of the genital systems in the Basommatophora, **Duncan, C. J.** (1); Evolution of the pulmonate genital system, **Duncan C. J.** (2); Origin and evolution of bivalves, **Franc, A.**; Affinities and evolution of major triploblastic animal phyla, **George, C. J.**; Statistical study of the evolution of *Gryphaea*, **Hallam, A.** (2); Ammonite extinction in the Cretaceous and the "idea" of extinction, **Holland, C. H.**; Evolution of *Gryphaea* and the degree of coiling of the shell, **Joysey, K. A.**; Evolution of the Metazoa and the position of *Stenothecoides* and *Cambridium*, **Lemche, H.**; Evolution of Cenozoic Pelecypoda, **Masuda, K.** (2); Ontogeny and evolution of Paleozoic Ammonoidea, **Miller, Furnish and Schindewolf [in Moore]**; Chronological significance of fossils and pseudo fossils, **Redini, R.**; Microevolution of actual and extinct species on Ventotene and their active and passive migration, **Sacchi, C. F.** (2); Faunal evolution in "étangs" in the Rhône delta, **Schachter, D.**; Evolution of hinge in Sarmatian Mactridae, **Sidorova, N. P.** (1); Evolution of the *Paraceratites* and origin of the *Ceratites*, **Virgili, C.**

Phylogeny and Ontogeny.—Evolution and ontogeny in Mesozoic Ammonoidea, **Arkell, Kummel & Wright [in Moore]**; Ontogeny of gastropod shell, and of Prosobranchia, Opisthobranchia and Pulmonata, **Cox, L. R.** (6); Reconstruction of bivalve phylogeny, **Cox, L. R.** (9); Theories on the phylogeny and origins of *Tamanovalva limax*, **Cox & Rees**; Mesozoic pelecypod relationships, origins and derivations, **Dickins, J. M.** (1); Origin of the Pteriidae, **Dickens, J. M.** (2); General notes on molluscan phylogeny, **Ehrenberg, K.**; Ontogeny of gastropods, **Fischer, P-H**, (1); Origin and evolution of bivalves, **Franc, A.**; Spermiogenesis in relation to phylogeny, **Franzén, Å.**; Ontogeny of the ligament and hinge lines of Noetidae and Carditidae, **Freneix, S.** (2); Ontogeny and evolution of form in Laevaptychi, **Gasiorowski, S. M.**; Changing pattern of *Polycera* during ontogeny, **Haefelfinger, H-R.** (3); Ancestry of the Inoceramidae, **Hayami, I.** (2); Phylogeny of the earliest pelecypods, **Horný, R.**; Ontogeny and phylogeny of Japanese Cenozoic Turritellidae, **Kotaka, T.** (1); Turritellid phylogeny in the later Cenozoic, **Kotaka, T.** (2); *Stenothecoides* and *Cambridium* in phylogeny, **Lemche, H.**; Ontogenesis, of *Colombiceras*

Mikhailova, I. A.; Fossil sequence of molluscan groups, **Milburn, W. P.**; Ontogeny and evolution of Palaeozoic Ammonoidea, **Miller, Furnish & Schindewolf [in Moore]**; Molluscan phylogeny, **Müller, A. H.**; Ontogenetic development of the hinge in Black Sea Veneridae, **Nevesskaya, L. A.**; Probable phylogenetic derivation of Ostreacea from Pectinacea, **Newell, N. D.**; Ammonite phylogeny, **Obata, I. (2)**; Ontogeny of Mollusca, **Portmann, A.**; Ontogenetic sutural development and it significance in ammonoid classification, **Ruzhentsev, V. E. (1)**; Ammonite phylogeny, **Schindewolf, O. H. (1)**; Ontogeny of the Belemnite genera *Belemnitella* and *Belemnella*, **Schmid, F. (2)**; Phylogenetic relationships of the Sarmatian mactrids, **Sidorova, N. P. (3)**; Ontogenetic study of ammonite sutures, **Sornay, J.**; Metamorphosis from the viewpoint of animal phylogeny, **Uchida, T.**; Evolution of *Paraceratites* and origin of *Ceratites*, **Virgili, C.**; Ontogeny and evolution within the dwarf ammonites, **Vogel, K-P, (1)**; Ontogeny of *Hippurites*, **Vogel, K. (2)**.

Genetics and Heredity.—Chromosome morphology of aquatic pulmonate snails, **Burch, J. B. (1)**; Chromosome numbers of aquatic pulmonates, **Burch, J. B. (2)**; Chromosome numbers of schistosome vector snails studied from ovotestes in active gametogenesis, **Burch, J. B. (3)**; Chromosome numbers of ancylid snails, **Burch, Basch & Bush**; On Chromosomes of *Physa gyrina* Say, figs. **Burch & Bush**; Genetics of polymorphism in the snail *Cepaea nemoralis*, **Cain, King & Sheppard**; Genetics of polymorphic *Cepaea*, **Clarke, B.**; Attempt to obtain polyploids of *Helix* for use in radiobiology, **Evans, H. J.**; Chromosome study of Melaniidae with reference to parthenogenesis and polyploidy, **Jacob, J.**; Chromosomes of *Ariophanta* spp., **Natarajan, R., (1)**; Chromosomes during *Viviparus* spp. spermatogenesis, **Ramamoorthi, K. (2)**; "Casual" phenomena in the natural sharing of genes, **Sacchi, C. F. (1)**.

Variation.—Differences observed in the descendants of self and cross fertilized *Australorbis glabratus*, **Azevedo & Pequito**; Genetically determined colour and banding varieties of *Cepaea*, **Clarke, B.**; Colour variation and banding in *Cepaea nemoralis* populations in Ireland, **Cook & Peake**; of *Helicella* (*Cernuella*) *profuga* in Italy, **De Joanna & Sacchi**; *Littorina saxatilis*, **Fischer-Piette & Gaillard**; Variation in Australian specimens of *Pinctada albina*, **Hynd, J. S.**; Variation of *Clausilia dubia* Drap. in the Eastern Alps, figs, **Klemm, W. (1)**; *Dorsanum duplicatum* Miocene, Moldavia, **Roshka, V. K.**; On variations in the Unionidae, **Stratton, L. W. (1)**; Variations in Australian haliotids, **Talmadge, R. R. (2)**; A large *Cottonia nodiplicata*, **Weaver, C. S. (1)**; Colour pattern variation among *Liguus* on Florida Keys, **Young, F. N.**

Teratology.—A malformed *Conus ebraeus*, **Anon (20)**; 2 symmetrical penes in *Helix aspersa*, **Alaphilippe, Regondaud & Tardy**; Distorted cowries in the S. Australian Museum collection, **Cotton, B. C. (18)**; A sinistral *Campeloma integrum*, **Dexter, R. W.**; Asymmetrical structure of parietal ganglia in *Papillifera bidens*, **Quattrini, D. (2)**.

ECOLOGY

General Studies.—Mytilidae from Argentina, **Agoitos de Castellanos, Z. J. (1)**; Mollusca of Hungary, **Agócsy and Pócs**; *Macrocallista nimbosa* at Alligator Harbor, general study, **Akin & Humm**; *Pisidium* from Armenia, **Akramovskii, N. N.**; *Aeolidia pappilosa* in Portugal, **Almaça, C.**; Terrestrial Mollusca from Spain, **Altimira, C.**; Seasonal variation in chemical content of *Tapes pullastra*, **Álvarez-Seoane, G.**; Ecological notes on *Scintilla vitrea*, figs., **Arakawa, K. Y. (2)**; General Ecological observations on *Ephippodonta murakamii* Kuroda, figs., **Arakawa, K. Y. (3)**; *Australorbis glabratus olivaceus* general study, **Azevedo, Costa Faro & Pequito**; The commercial value and general ecology of *Mytilus galloprovincialis* on the Black Sea coasts of Roumania, **Bacalbaşa-Dobrovici, N.**; The ecology of the Gann Flat Dale, Pembs., **Bassindale & Clark**; Ecological catalogue of Lake Okoboji gastropods, **Bovbjerg & Ulmer**; Introduction of aquatic animals into Hawaiian waters, **Brock, V. E.**; Biology and culture of *Crassostrea* in Hong Kong, **Bromhall, J. D.**; Reconstruction of the Pleistocene habitat of terrestrial molluscs from Jefferson County, Kentucky, **Browne & McDonald**; *Haliotis* from Baja California, **Buen, F. de**; *Edenttellina* living on *Caulerpa* in Victoria, Australia, **Burn, R. (1)**; Composition and ecology of the lower Greensand ammonite fauna, **Casey, R. (1)**; Mollusca in the bottom fauna of Lake Okoboji, Iowa, **Clampitt, Waffle & Bovbjerg**; Ecology of the bay at Point Noire, Congo, **Collignon, J. (1)**; Flotation devices and habitats of marine animals, **Denton, E.**; The fauna at 600 metres off Castiglione, **Dieuzeide, R.**; Terrestrial molluscs studied as part of the Chicago University expedition to Iran 1960, **Drake, R. J. (1)**; *Margaritifera* now considered extinct in Poland after a survey of the Izerskie Mts, Lower Silesia, **Dutkiewicz, J.**; Applied aspects of invertebrate paleontology and fossil collecting, **Easton, W. H.**; General study on lamellibranchs, **Eberzin, A. G. [in Orlov]**; Relation of nervous system and sense organs to mode of life of land pulmonates, **Elwi Abd el Hamid, M.**; Biology of Scaphopoda, **Fantinet, D.**; Distribution and ecology of commercial shellfish of the beaches in the " Ria de Vigo ", **Figueras, A. (2)**; Mollusca of limestone quarries in northern Czechoslovakia, **Flasar, I.** Mollusca from banks of brooks in the Mecsek Mountain, Hungary, **Gebhardt, A.**; Study of hydrophytic colonies in Lake Trasimeno, **Giovanni, M. V. di**; Puerto Rico—Ecological notes, **Golley, F. A.**; Friesland hydrobiology, **Hartog & Tulp**; Mollusca and other invertebrates in Pegnitz province, Germany, **Hässlein, L.**; Survey of the Dollart-Ems estuary, **Heide, S. v. der**; Terrestrial Mollusca of the Rhone Delta, **Hoffmann & Bigot**; *Carychium stygium* and associated cave dwellers in Kentucky, **Hubricht, L. (8)**; Geographical discontinuities or clines which affect characters modifying the colour and size of *Pinctada* shells, **Hynd, J. S.**; Land, freshwater and brackish water snails from Schleswig-Holstein, **Jaeckel, S. G. A. (2)**; Mollusca of the Bay of Pärnu Estonia, **Järvekülg, A.**; Malayan land and freshwater species and description of a new *Gyliotrachela*, **Jutting, W. S. S.v. B. (1)**; Mollusca of the zoobenthos in the Bay of Varna, **Kaneva-Abadjieva, V. (1)**; Ecology of Pleistocene and recent molluscs in South Western Australia, **Kendrick, G. W.**; *Conus* from Trincomalee, Ceylon, **Kohn, A. J. (2)**; Lamellibranchia and Gastropoda, **Korobkov, I. A. (3)**; *Siliqua* in Georgia and its stratigraphical significance, **Kvaliashvili, G. A. (1)**; Unusual preservation of interglacial Mollusca, **Lazar, E.**; Comparison *Neopilina* and fossil Tryblidiidae, **Lemche & Wingstrand**; Land molluscs of the Caucasian isthmus, **Likharev, I. M. (2)**; Malacological news from Czechoslovakia, **Ložek, V. (2)**; *Hydrobia jenkinsi* E.A.Sm., **Lucas, A.**; Ecology of British freshwater gastropods, **Macan & Cooper**; Conditions favourable for scallops around Scotland, **McIntyre, A. D.**; Fauna of a small tidal island in Belfast Lough, **McMillan, N. [F.] (2)**; Effect of new industries on the numbers of Mollusca in the étang de Berre, **Mars, P. (1)**; Hydrobiidae from the littoral zone (France), **Mars, P. (2)**; Scallop ecology particularly relevant to scallop fishing, **Mason, J.**; Ecological study of thermal waters at Zagorje, Hrvatska, **Matoničkin, I.**; Mollusca responsible for the spread of

Bilharzia south of Lake Kivu, Africa, **Meyus, Clerx & Evens**; *Sphaerium* and *Pisidium* from the Upper Volga dam, **Mitropolskii, V. I.**; Filtration and aeration unit for experimental snail aquaria, **Moore, D. V.**; The Cephalopod fauna of the Mediterranean Spanish coast, **Morales, E. (1)**; Study of *Opisthoteuthis agassizii* caught for the first time in the Mediterranean in August 1959, **Morales, L. (2)**; Shipworms from Visakhapatnam harbour, **Nagabhushanam, R. (2)**; Study of *Theodoxus fluviatilis* **Neumann, D. (1)**; Hydrobiology of the Danube and Lake Graeca, **Nicolau, Popovici & Cristian**; Ecology of benthic organisms in Illinois lakes, **Paloumpis & Starrett**; Molluscan shells washed up on a sandy beach, South Kanara, **Patil & Gopalkrishna**; New faunal element from Zaprešić-brijeg Yugoslavia, **Pavlovsky, M.**; An ecological study of the Gastropoda, **Pchelintzev & Korobkov [in Orlov]**; *Brechites penis*, Singapore, **Purchon, R. D. (1)**; Mating, behaviour, development and general ecology of British slugs, **Quick, H. E. (4)**; Occurrence of squids in catches off the Scottish coast, **Rae, B. B.**; Mollusca of the Montane and Arctic-Alpine zones in Utah, **Roscoe, E. J. (1)**; Influence of the snail's shell on its rate of locomotion **Roscoe, E. J. (2)**; Ecological and palaeoecological survey of Ventotene, **Sacchi, C. F. (2)**; Ecology of estuarine, zooparasites in an oyster bed community, **Shuster, C. N. jr.** Study of *Thais haemastoma floridana* in Chincoteaque Bay, **Sieling, F. W.**; Ship-fouling in New Zealand waters, **Skerman, T. M.**; The Mollusca as the most important group of Lake Ohrid's animal population due to endem-' ism, **Stankovič, S.**; Land snails from the " Williams Site " Central Texas, **Suhm, D. A.**; Unionidae of the Danube **Tadić, A. (2)**; Cavernicole *Oxychilus*, habits and behaviour, **Tercafs, R. R. (2)**; Warning and protective coloration shown by Opisthobranchia, **Thompson, T. E. (5)**; *Dreissena polymorpha* spread, habits and life history in Estonia, **Timm, T.**; A short note about *Tamanovalva limax* from the coasts of Japan, **Tortonese, E.**; The Molluscan fauna of Lake Iznik, **Traut, W.**; The bottom fauna of Airisto sound, Finland, **Tulkki, P.**; Biology of *Theodoxus fluviatilis*, **Ulrich & Neumann**; The molluscan fauna of Bulgaria excluding the Clausiliidae, **Urbański, J. (1)**; Orculidae and Pupillidae from Bulgaria, **Urbański, J. (2)**; Study of the ecology of a new Jugoslavian *Delima*, **Urbański, J. (3)**; Clausiliidae of Bulgaria **Urbański, J. (4)**; Land and freshwater Mollusca from the Dolomites, **Venmans, L. A. W. C.**; The freshwater pearl mussel in Estonia, **Vilbaste, J.**; Palaeoecology of marine Pleistocene Mollusca from Vancouver Island, **Wagner, F. J. E.**; Land molluscs from central S. Florida, **Wilson, D.**; Life activity of *Viviparus fasciatus*, **Wojciechowska & Trojan**; Freshwater Mollusca from Weimar and its surroundings, **Zeissler, H. (4)**.

Association and Effects.—Ecological associations of *Ostrea* spp. in the Gulf of San Matías, **Ageitos de Castellanos & Cabrera**; Collection and study of plankton and molluscan associations, **Anichini, C. (1)**; *Australorbis glabratus* susceptibility to *Schistosoma mansoni*, **Barbosa & Barreto**; Temporary association between *Loligo brasiliensis* and *Percophis brasiliensis*, **Castellanos, Z. A. de**; Associated species with *Cypraea saulae*, **Cate, C. N. (1)**; Bacteriological study of the natural flora of *Crassostrea gigas*, **Colwell & Liston**; Marine wood borers in Madras harbour, **Daniel, A. (1)**; Molluscan species endemic to the Chatham Islands, **Dell, R. K.**; Limnological investigation of the delta lakes of Egypt, **Elster, H-J.**; Synecological study on intertidal communities, **Hoshiai, T.**; Infectivity of the Philippine strain of *Schistosoma japonicum* in *Oncomelania*, **Hsü & Hsü**; Red Sea chitons and their affinities with those in the Indian Ocean and Mediterranean, **Leloup, E. (1)**; Species associated with *Hydrobia jenkinsi* in France and list of localities, **Lucas, A.**; Intermediate hosts of *Schistosoma* in Africa, **Mandahl-Barth, G.**; Luminous symbiotic bacteria in squids, **Nicol, J. A. C. (2)**; The benthos biomass of the central and southern Caspian, **Romanova, N. N.**; Development in the snail vector of oriental schistosomiasis, **Roth & Wagner, (2)**; Animal-sediment relationships Buzzards Bay, **Sanders, H. L. (1)**; Soft-bottom community Buzzards Bay, Mass. **Sanders, H. L. (2)**; Epizoic oysters attached to amononoid shells as a key to the ecology of the ammonoid, **Seilacher, A.**; Benthic communities in Lake Ohrid, **Stankovič, S.**; Environment and lithology of the Rhone delta, **Straaten, L. M. J. U. van**; Molluscan vectors, **Teskey, M. C. (2)**; *Physa sayii* a new intermediate host for the turtle lung fluke, **Ulmer, M. J.**; Competitors with oysters for substrate attachment space, **Wells & Gray (1)**; Hadal communities, **Wolff, T.**; Relationships between trematodes and molluscs, **Wright, C. A. (2)**.

Effect of Environment and Adaptation.—Critical salinity value for *Brachidontes recurvus* in Chesapeake Bay, **Allen, J. F.**; Relation of shell form of Mesozoic Ammonoidea to a sedimentary environment, **Arkell, Kummel & Wright [in Moore]**; Environmental conditions suitable for mollusc culture, **Azevedo, Costa Faro & Pequito**; Snail environments and relationship to infection with *Schistosoma mansoni*, **Barbosa, F. A. S.**; Respiration of *Theodoxus fluviatilis* in different media, **Bielawski, J.**; Development of eggs of freshwater Mollusca, **Cassarà, A.**; Settlement in relation to water current velocity in Madras harbour by marine borers, **Daniel, A. (2)**; Nonmarine Mollusca from an archaeological site at La Playa, Mexico studied as to environmental conditions under which they lived, **Drake, R. J. (3)**; Effect on benthic organisms of Japanese coasts, of tailings from refineries, **Fujiya, M. (2)**; Variability of *Neptunea despecta* with environmental conditions, **Golikov, A. N.**; Environments in which *Pomatiopsis* spp. are found on the Southern Atlantic coastal plain of U.S.A., **Hubricht, L. (6)**; Salt marsh and brackish water molluscs, **Jaeckel, S. G. A. (1)**; Effect of variations in salinity on *Teredo navalis*, **Kudinova-Pasternak, R. K.**; Environment of deposition of non-marine Pleistocene Mollusca, **La Rocque A. (2)**; Environmental factors governing the infection of *Mytilus edulis* by *Mytilicola intestinalis*, **Leloup, E. (2)**; Environment suggested by freshwater mussel shells discarded by Illinois Indians, **Matteson, M. R.**; *Mya arenaria* salinity toleration **Matthiessen, G. C. (1)**; Relationships between spawning and environmental temperature, **Mileikovsky, S. A.**; Radioactive absorption by marine molluscs, **Polikarpov, G. G.**; Genetical research on environmental conditions and chromatic characters, **Sacchi, C. F. (1)**; Factors influencing mollusc distribution in the Rhone delta, **Straaten, L. M. J. U. van**; Ecology of a salt water lagoon near Mandapam, **Tampi, P. R. S.**; Differential distribution of *Littorina* in the intertidal environment, **Zieg, R. G.**; Environmental effects on mollusc populations **Zeissler, H. (1)**.

Habitat.—Manganese deposition on living mollusc shells in the Clyde sea area, **Allen, J. A. (1)**; Settling of mussels and the influence of water currents, **Andreu, B.**; Geographical conditions and plankton cycles in Mar Grande and Mar Piccolo of Taranto, **Angelis & Valle**; Vertical range of St. Kilda littoral molluscs, **Bagenal, T. B.**; Coastal marine habitat of molluscs at the upper end of the Bay of Fundy, **Bousfield & Leim**; Differences in fauna of grazed and ungrazed grassland in Tiree, Argyll. **Boyd, J. M.**; Habitat and habits of *Bullia laevissima*, **Brown & Noble**; *Pseudamnicola confusa* in a muddy biotope between high and low waterline, **Butot, L. J. M.**

(3); Zuiderzee gastropods and their changing habitat, **Butot, L. J. M.** (4); Colouration and camouflage in Opisthobranchia, **Cartwright, R. A.**; Fauna and habitat in the Bay of Naples off San Giovanni à Teduccio, **Cognetti & Santarelli**; Marine wood borers, associations and conditions of sites chosen in Madras harbour, **Daniel, A.** (1); Mollusca from Arctic N. America, **Ellis, D. V.**; Of Scaphopoda, **Fantinet, D.**; Change of intertidal habitat of Mollusca in Southern Portugal, **Fischer-Piette, E.** (2); Characteristics and modifications of *Littorina saxatilis* in estuaries and rias, **Fischer Piette & Gaillard**; *Limicolaria* from West Africa, **Frömming, E.** (1); *Biomphalaria* in Lake Kivu and its survival at different depths, **Gillet, Brauaux and Wolfs**; Habitat and fossil deformation, **Grăţ, I. E.**; A survey of the Mollusca from the western river basins entering the Black Sea, **Grossu & Căraŭşu**; Ecological study of molluscan habitats in Pegnitz province, Germany, **Hässlein, L.**; The river Pärlälven (Pearl River) as a breeding ground for pearl mussels, **Hendelberg, J.**; Cave dwelling snail *Carychium* from Kentucky, **Hubricht, L.** (8); Nest building in Limidae of the German Triassic, **Jefferies, R. P. S.**; Rates of water tranport in *Mytilus* from different tidal levels, **Jorgensen, C. B.**; Shore molluscs, N. Mozambique, **Kalk, M.**; pH in the habitat of *Galba truncatula*, **Kašťák, V.**; Habitat of *Cypraea caputserpentis*, **Kay, A.**; Habitat and zonation of intertidal areas and their relation to the Vermetidae, **Keen, A. M.** (4); Chemical study of the water in ponds containing *Anodonta cellensis*, **Komárek K.**; Fossil Mollusca general study, **Korobkov, I. A.** (3); Coliform bacteria in the soft shelled clam *Mya arenaria* and its habitat through a seasonal cycle, **Lear, D. W.**; Bottom fauna of the Molochnaya estuary, Ukraine, **Lubyanov, I. P.**; Tenth year of molluscan survey in the Slezské Mts., Czechoslovakia, **Mácha, S.** (1); Colouration of *Nerita oryzarum* in various habitats, **Mahdihassen, S.**; Effect of power station cooling water on benthonic organisms, **Markowski, S.**; Littoral molluscs in a palaeogene submarine slide in the Central Carpathians, **Marschalko & Volfova**; Hydrographic concept of the bay scallop habitat, Niantic River, **Marshall, N.**; Larval fixation and habitats of *Ostrea* and *Gryphaea*, N.W. France, **Marteil, L.**; Intertidal zonation of *Mya arenaria*, **Matthiessen, G. C.**, (2); Burrows and pallets of marine borers from Japan, **Mawatari & Kitamura**; Maintenance of position on the shore by *Lasaea rubra*, **Morton, J. E.**, (3); Vertical zonation of shipworms in Visakhapatnam harbour, **Nagabhushanam, R.** (3); Inhibition of wood borers by heavy fouling accumulation, **Nagabhushanam, R.** (5); Conditions in which mussels live off the east Crimean coast, **Nikitin, V. N.**; Malayan *Anadara granosa*, **Pathansali & Soong**; Soft-shelled clam bottom survey in Somerset Co., Maryland, **Pfitzenmeyer, H. T.** (1); Effect of varying salinities on Black Sea species of *Mytilus galloprovincialis*, **Pora, Ruşdea & Stoicovici**; Position adopted in the substratum by *Brechites penis*, **Purchon, R. D.** (1); Dwarfism and evident relation to actual microclimatic conditions on Ventotene, **Sacchi, C. F.** (2); Animal-sediment relationships, **Sanders, H. L.** (1); Study of the brackish water habitat of some fossil Mollusca, **Seneš, J.** (1); Adaptation of *Teredo navalis* to media of altered salinity, **Soldatova & Turpaeva**; Ecology of hyolithids studied from Siberian Cambrian deposits, **Sysoev, V. A.** (2); Manganese deposits on *Anodonta* shells from pools around Homole and Prague, **Táborský, K.**; Of a cave dwelling mollusc in Comblain-au-Pont, Belgium, **Tercafs, R. R.** (1); The bottom fauna of Lake Huron, **Teter, H. E.**; Troglobionts in Japanese Caves, **Torii, H.**; Occurrence of bottom animals of Airisto Sound at different depths, **Tulkki, P.**; Cephalopod habitats in the Atlantic, **Voss, G. L.** (1); General habitats of Mollusca, **Voss, G. L.** (2); Effect of pulp and paper mill wastes on spawning in *Crassostrea gigas*, **Waldichuk, M.**; Ecology and population fluctuations, of snails in Tanganyika, **Webbe, G.**; Attachment of *Mytilus edulis* at various locations, **Wells & Gray** (2); List of the natural habitats in Silesia and Georgia of *Boettgerilla*, **Wiktor, A.** (3); Conjectural middle palaeozoic history of central and west Texas, **Wilson & Majewske**; Attempt at analysing the habitat of *Viviparus fasciatus*, **Wojciechowska & Trojan**; Dwarfing and reduction of reproductive potential due to laboratory crowding of freshwater snails, **Wright, C. A.** (1); Habits and habitat of *Lepeta concentrica*, **Yonge, C. M.** (1).

Effects of Temperature.—Effect of storing temperature on the content of muscular nucleotides of some seashells, **Arai, K.**; Cercariae elimination by *Australorbis* controlled by temperature and light intensity, **Barretto, A. C.**; Influence of climate, in particular temperature on hatching of *Cochlicella*, **Boulangé & Hoestlandt**; Effect on temperature on marine associations on Areiño beach, Spain, **Figueras, A.** (3); Lethal high temperature for *Littorina littorea*, **Fraenkel, G.**; Influence of temperature on respiration of *Arianta*, **Gromadska & Przybylska**; As a controlling influence on the geographic distribution of molluscan species, **Hall, C. A.**; Effect of cold on *Helix aspersa* growth, **Herzberg, F. & A.**; Thermostability of musculature of fresh-water molluscs, **Jamusova, T. A.**; Influence of temperature on geotaxis and phototaxis in *Littorina obtusata*, **Janssen, C. R.**; Survival of *Teredo navalis* from the Black Sea in various temperatures, **Kudinova-Pasternak, R. K.**; Effect on Mollusca in the White Sea of temperature variations of the water, **Mileikovsky, S. A.**; Tubercle development in *Umbonium* in warm and cool seas, **Nagasawa, J.** (2); Effect of low temperature on ascorbic acid content of *Arion* ovotestis, **Pelluet, D.**; Normal summer temperatures experimentally reached inducing gametogenesis in *Pecten* in the winter, **Turner & Hank.**

Movements and Locomotion.—Directional movements of the intertidal snail *Littorina littorea*, **Alexander, D. G.**; Magnetic field strength and orientation in *Nassarius*, **Brown & Barnwell**; The buoyancy of marine animals, **Denton, E.**; Methods of locomotion employed by bivalves, **Franc, A.**; Swimming ability in the Neoammonoids, **Géczy, B.** (1); Velocity of movement of *Littorina obtusata* at varying temperatures, **Janssen, C. R.**; Exploration and locomotion by *Lasaea rubra*, **Morton, J. E.** (3); Factors affecting the speed at which gastropods move, **Roscoe, E. J.** (2); Rapidity of movement and thermal conditions in *Viviparus fasciatus*, **Wojciechowska & Trojan**; Locomotion of the paper nautilus, **Young, J. Z.** (4).

Boring and Burrowing Habits.—Settlement of marine foulers and borers in Madras harbour, **Daniel, A.** (2); Boring of bivalves by Lutetian gastropods, character of perforations, **Fischer, P. H.** (4); Habits and habitat of *Cyclope neritea*, **Morton, J. E.** (2); Wood inhabiting organisms from Venedig Lagoon, **Roch, F.**

Breeding Habits and Breeding.—Mating and spawning habits of some marine molluscs, figs., **Arakawa, K. Y.**, (4); Cross and self fertilization in *Australorbis glabratus*, **Azevedo and Pequito**; Egg laying and hatching differences between 2 *Schistosoma* intermediate hosts, **Barretto, A. C.**; Method of copulation in *Bosellia mimetica*, **Becker, R.**; Breeding seasons of slugs in gardens, **Bett, J. A.**; Abalones of California, **Cox, K. W.**; Molluscan reproduction at Ria de Vigo, **Figueras, A.** (1); Study of the mode of life of *Zenobiella rubiginosa*, **Frömming, E.** (3); Mode of life of Succineidae, **Frömming, E.** (5); On the way of life of the Neoammonoids, **Géczy, B.** (1); Copulation in *Polycera*

quadrilineata, **Haefelfinger, H-R.** (3); Copulation in cerebralectomized snails, **Hekstra & Lever**; Artificial cross-fertilization of *Laternula japonica*, **Kagawa, Y.**; Spawning habits of *Tamanovalva limax*, **Kawaguti & Yamasu** (2); Reproduction and breeding habits of the Littorinidae, **Kojima, Y.**; Self fertilisation in *Achatina marginata*, **Larambergue, M. de**; *Archachatina*, reproduction, **Larambergue & Alaphilippe**; Coitus in *Mediappendix vagans*, **Lee, C. B.**; Copulation in *Olivella verreauxii* **Marcus, Ev. & Er.** (2); Hermaphroditism in *Placopecten magellanicus*, **Merril & Burch**; Spawning of *Eledone cirrosa*, **Morales, E.** (4); Breeding season of *Anadara granosa* in Malaya, **Pathansali & Soong**; *Placopecten magellanicus* on Georges Bank, Atlantic, **Posgay & Norman**; Presence of spermatozoa in the female reproductive system at various periods following copulation of *Oncomelania*, **Roth, A. A.**; Early breeding of *Marpessa laminata* (Mont.), **Stratton, L. W.** (2); Breeding habits of *Calyptraea sinensis*, **Streiff, W.** (2); Reproductive cycle of *Dreissena polymorpha*, **Vlastov & Kochanova** *in* **Zhadin, V. I. et al.**; Copulation of *Deroceras reticulatum*, **Wiktor, A.** (1); Protandry and self fertilization in Calyptraeidae, **Wyatt, H. V.** (2); Spawning and fecundity of *Patinopecten yessoensis*, **Yamamoto, G.**

Duration of Life.—Ability of snail vectors to exist out of water and the effect of molluscicides, **Shiff, C. J.**

Population.—Abundance of *Macrocallista nimbosa*, **Akin & Humm**; Population mortality of *Brachidontes* in Chesapeake Bay, **Allen, J. F.**; Variation in size and age of *Australorbis* populations, **Azevedo, CostaFaro & Pequito**; Comparison of recent and Pleistocene populations of *Pisidium*, **Brodniewicz, I.** (2); *Cepaea nemoralis* from the Dartry Mts. Ireland, **Cook & Peake**; B chromosomes in populations of *Helix*, **Evans, H. J.**; Estimates of the numeric population of commercial shellfish in the " Ria de Vigo ", **Fiqueras, A.** (2); Population study on *Mytilus* in a salt marsh at Ganzirri (Messina), **Genovese, S.**; Populations, communities and associations in Lake Trasimeno, **Giovanni, M. V. di**; Growth of the individual and composition of the population of *M. margaritifera* in Sweden, **Hendelberg, J.**; Growth and life span of bay scallop populations, Niantic River, **Marshall, N.**; Intertidal zonation in populations of *Mya arenaria*, **Matthiessen, G. C.** (2); Numbers of *Eledone* in the eastern Mediterranean, **Morales & Bas** (2); Population survey of *Mya arenaria* in Somerset Co., Maryland, **Pfitzenmeyer, H. T.** (1) ; Population variations of *Australorbis strameneus* in Pernambuco, Brazil, **Pinotti, Rey, Aragão et al**; Molluscan population of the Konfederatka pool, Vistula Poland, **Stańczykowska, A.** (1) ; Population studies, **Stohler, R.** (2); Relation of species frequencies to specimen frequencies in the Rhone delta, **Straaten, L. M. J. U. van**; Shell coloration of *Theodoxus fluviatalis* populations, **Ulrich & Neumann**; Seasonal fluctuation in numbers of *Biomphalaria* in the Northern Province of Tanganyika, **Webbe, G.**; On oyster populations, **Wells & Gray** (1); Growth curves of *Bulinus* crowded together in the laboratory, **Wright, C. A.** (1); Mortality during the life history of *Patinopecten yessoensis*, **Yamamoto, G.**; Occurrence of male *Hipponix antiquatus* in populations, **Yonge, C. M.** (3).

Feeding Habits and Alimentation.—Feeding habits of some marine molluscs, **Arakawa, K. Y.** (1); Ecology and alimentary system of the Trochidae, **Casey, R.** (2); Relationship between oxygen uptake, energy requirements and available food for *Crassostrea*, **Collier, A.**; Feeding habits and digestive system of Nuculacea, **Cox, L. R.** (5); Food of Gastropoda, **Cox, L. R.** (6); Ecology and nutrition of *Trichia villosa*, **Frömming, E.** (4); Food and biotope of *Polycera quadrilineata*, **Haefelfinger, H-R.** (3); Feeding activity in cerebral-ectomized snails, **Hekstra & Lever**; *Pila* and *Viviparus* as food for field rats, **Jesus, Z. de**; Particle retention and rate of water transport in undisturbed lamellibranchs, **Jørgensen C. B.**; Feeding habits of Olividae, **Marcus, Ev. & Er.** (1); Flagellates as nutrition of *Mya arenaria* in a salt pond, **Matthiessen, G. C.** (1); Ciliary feeding in Mollusca, **Morton, J. E.** (1); Feeding and food detection by *Cyclope neritea*, **Morton, J. E.** (2); The feeding process in oysters, **Nelson, T. C.**; Feeding devices and mechanisms developed in molluscs, **Nicol, J. A. C.** (3); *Cavolinia tridentata* food of *Argonauta boettgeri*, **Okutani, T.**; Food of some freshwater gastropods, **Smirnov, N. N.**; *Pinctada maxima* feeding habits, diatoms as an important item of diet, **Takano, H.**; *Oxychilus* found to eat living Lepidoptera, when dwelling in caves, **Tercafs, R. R.** (2); Feeding habits and method of killing prey adopted by *Conus*, **Trefz, S. M.**; Description of the feeding tracks of *Chondropoma* from Navassa Island, **Turner, R. D.** (2); Effect of small cilia of the abfrontal gill surface of *Mytilus edulis*, **Yoneda, M.**; Effect of feeding at different times on *Octopus* memory patterns, **Young, J. Z.** (3); Feeding of *Argonauta argo*, **Young, J. Z.** (4).

Parasitism, Commensalism and Parasites.—Host-parasite relationships between *Schistosoma mansoni* and *Australorbis glabratus*, **Barbosa, F. A. S.**; Proven and potential vectors of *Schistosoma* in S. America, **Barbosa, F. S.**; Susceptibility of *Australorbis* to infection by *Schistosoma mansoni* in Brazil, **Barretto, A. C.**; *Mytilus* infested by a pycnogonid, **Benson & Chivers**; Study of *Schistosoma mansoni* in Madagascar, **Brygoo & Capron**; *Schistosoma* vector snails and their chromosome numbers, **Burch, J. B.** (3); *Xiphidiocercaria* in *Physa mexicana* from Paztcuaro, Michoacan, Mexico, **Caballero, y C., Garcia-Torres & Flores-Barroeta**; Intermediate snail hosts of bilharzia in Madagascar, **Capron & Brygoo**; Bilharzia cercarial infestation of *Bulinus* in Madagascar, **Capron & Lartigue**; Infection of *Australorbis glabratus* with *Schistosoma mansoni* in bacteria free conditions, **Chernin, E.**; Changes with age in the fauna of larval trematode forms of Dnieper molluscs, **Chernogorenko, M. I.**; Transport and laboratory culture of snail intermediate hosts of *Schistosoma haematobium*, **Claugher, D.**; Commensalism of *Montacuta* and *Phascolion*, **Deroux, G.**; Host/parasite relationships between *Bithynia* and *Opisthorchis*, **Duggan, A. J.**; Effect of NaPCP as a control for *Galba truncatula*, intermediate host of *Fasciola hepatica*, **Enigk & Düwel**; *Lymnaea truncatula* host of *Fasciola hepatica* in Turkey, **Güralp & Simms** (1); *Lymnaea auricularia* as host of *Fasciola gigantica* in Turkey, **Güralp & Simms** (2); Sporocysts of *Leucochloridum paradoxum* in *Succinea putris*, **Honer, M. R.** (1); *Diplodiscus* species parasitic in *Paludina vivipara*, **Honer, M. R.** (2); Snail hosts of *Fasciolopsis buski* in South Taiwan, **Hsieh, H.-C.**; *Protostrongylus* larvae in snails, **Kassai, J.**; *Biomphalaria a. pfeifferi* vector of *Schistosoma mansoni* breeding in Stanleyville, Congo, **Lassance, M.**; Glochidia of *Unio* and *Anodonta* on fish in Norway, **Malmberg, G.**; Infections of *Gonyaulax tamarensis* causing shell fish poisoning in Canada, **Medcof, J. C.**; Parasitism in Gastropoda, **Nicol, J. A. C.** (3); Distribution of fasciolasis and studies on freshwater molluscs in the Stalingrad region, **Petrotchenko & Rudjakova**; *Agriolimax reticulatus* from Weybridge pastures as a host to the lungworm, **Rose, J. H.**; *Biomphalaria boissyi* and possible schistosomiasis in the Egyptian High Dam area, **Schalie, H.v.d.** (1); Ecology of estuarine zooparasites, **Shuster jr., C. N.**; Polyclads in the mantle cavities of three gastropods, **Smith, E. H.**,; Influence of *Pinnotheres sinensis* on the

weight of host flesh of *Tapes japonica*, **Sugiura, Sugita et al**; Endoparasitic gastropods of holothurians in Puget Sound, **Tikasingh, E. S.**; Occurrence of a nematode parasite in *Stylodon*, **Turner & Pini**; Intermediate hosts of *Fasciola hepatica* in Japan and England, **Ueno & Watanabe**; Snail intermediates of *Paragonimus*, **Yokogawa, S. & M., & Cort.**; Ovine endoparasites of Egyptian sheep with special reference to fascioliosis, **Zaki, H.**; Parasitic atrophy of *Helix* and *Viviparus* gonads, **Zannini, A. M. (2).**

Disease and Injuries.—Shell disease in *Crassostrea gryphoides*, **Durve & Bal**; Injuries in shells of nautiloids in particular *Trocholites depressus*, **Stumbur, K. A.**.

Behaviour.—Magnetic compass response and orientation in *Nassarius*, **Brown & Bennett & Webb**; Magnetic response of *Nassarius* and its solar relationships, **Brown, Brett, Bennett et al.**; Relationship between photic and magnetic response in snails, **Brown & Huttrer**; Magnetic response and lunar relationships of *Nassarius*, **Brown, Webb & Brett**; The plexiform zone and shape recognition in the octopus, **Deutsch, J. A.**; *Octopus* shape discrimination **Deutsch & Sutherland**; Habitat and mode of life of *Helicodonta obvoluta*, **Frömming E. (2)**; Orientation by scent in nudibranchs, **Haaften & Verwey**; Training an octopus to attack with descrimination by the use of its sense of hearing, **Hubbard, S. J.**; Geotaxis and phototaxis in *Littorina obtusata*, **Janssen, C. R.**; Photonegative habit of young *Lima*, **Jefferies, R. P. S.**; Behaviour of shells progressively covered by water, **Kornicker & Armstrong**; General study on gastropods and lamellibranchs, **Korobkov, I. A. (3)**; Response of benthonic organisms, to cooling water from power stations, **Markowski, S.**; Chemoreception in *Australorbis*, **Michelson, E. H. (2)**; Habits and colouring of *Eledone aldrovandi*, **Morales, E., (3)**; Living attitude of ammonites indicated by the orientated epizoans, **Seilacher, A.**; Deep sea cephalopods, **Smith, F. G. W.**; Penetration of lead by *Martesia striata*, **Springer & Beeman**; Mating behaviour influenced by meteorological phenomena, **Stohler, R. (2)**; Descriptive notes and observations on *Anadara amicula* Yokoyama figs., **Tanaka, K.**; Of cave dwelling *Oxychilus cellarius*, **Tercafs, R. R. (2)**; Behaviour shown by Opisthobranchs when abruptly disturbed, **Thompson, T. E. (5)**; Of terrestrial gastropods in Sweden, **Walden, H. W.**; Direction finding by *Viviparus fasciatus*, **Wojciechowska & Trojan**; Responses of octopuses to vibration and sonic frequencies, **Young, J. Z. (1).**

Enemies, Defence and Protection.—Predation of *Venus striatula* (Costa) by *Natica alderi* (Forbes), **Ansell, A. D.**; Attractiveness of certain bivalves to *Urosalpinx*, **Blake, J. W.**; *Asterias* preying on *Venus*, method of attack, **Burnett, A. L.**; Reaction of octopus to starfish, **Eyerdam, W. J. (1)**; *Lambis* the prey of *Conus*, **Frost, R. M.**; Ecology of molluscan enemies of edible molluscs, **Hancock, D. A.**; Venomous molluscs in the Far East, **Keegan, H. L.**; *Mytilus* infested by *Mytilicola intestinalis*, **Leloup, E. (2)**; Control of shellfish predators, **Loosanoff, MacKenzie et al.**; Predation of young oysters by *Panopeus herbsti*, **McDermott, J. J.**; Scallop predators in the Niantic River, **Marshall, N.**; Shell secretion to cover settling organisms on *Placopecten*, **Merrill, A. S.**; Heteropods and Pteropods as food of fish, genera (*Thunnus and Alepisaurus*), **Russell, H. D.**;" Predator-prey " recognition in an oyster-bed community, **Shuster, jr., C. N.**; Defensive acid secretion in marine slugs and snails, **Thompson, T. E. (1)**; Defensive acid secretion in marine gastropods, **Thompson, T. E. (2)**; Defensive adaptations in Opisthobranchia, **Thompson, T. E. (5)**; *Asterias*—enemies of oysters in Long Island Sound, **Wells & Gray (1)**; Snails eaten by song thrushes, **White, A. G.**

Harmful to Man.—Another death from *Conus* " bite," **Anon, (11)**; Mollusca which are poisonous when eaten and their effects on sailors, **Fabre, R.**; Abalone viscera poisoning and photosensitization diseases, **Hashimoto, Naito & Tsutsumi**; Deaths due to cone shell stings, **Keegan, H. L.**.

Biological Control.—Control of shipworms, **Carpine, C.**; Studies in biological control of schistosomiasis, **Chernin, Michelson, et al.**; Trials in the laboratory and field of a new molluscicide, **Foster, Teesdale & Poulton**; Biological control using molluscicides, **Hiatt et al**; Reduction of the rate of multiplication of field rats by control of freshwater snails, **Jesus, Z. de**; Control of bilharziasis in Southern Lake Kivu, **Meyus, Clerx & Evens**; Bilharziasis vectors in Mozambique, **Morais, T. de**; Antifouling paints protecting wood against marine borers, **Nagabhushanam, R. (1)**; Mercuric compounds tried out as control measures for shipworms, **Nagabhushanam, R. (4)**; Destruction of aquatic snails by molluscicides, **Shiff, C. J.**; Control of *Martesia striata* attacking lead sheathing of power cables, **Springer & Beeman**; Snail eradication with phenol chloride, **Tölgyesi, G. (1)**; Copper sulphate as a molluscicide, **Tölgyesi, G. (2).**

Effect of Light and Luminescence.—Effect of light on growth and shell colour of *Mytilus*, **Andreu, B.**; Behaviour in darkness and orientation by light of *Lassaea rubra*, **Morton, J. E., (3)**; Symbiosis with luminous bacteria found in light emission by cephalopods, **Nicol, J. A. C. (2)**; Deep sea and pelagic Mollusca exhibiting luminescence, **Nicol, J. A. C. (3)**; Response to light shown by post veliger larvae of *Calyptraea chinensis*, **Wyatt, H. V. (1).**

Hibernation.—Survival of aestivating pulmonate vectors of schistosomiasis, **Olivier, L.,**

Effects of Salinity.—Experimental salinities for *Brachidontes* to determine critical salinity value, **Allen, J. F.**.

Technique.—Notes on dissecting the hearts of *Sepia* **Alexandrowicz, J. S. (2)**; Variations in plankton samples using different nets, **Anichini, C. (2)**; Staining techniques used in the study of the Golgi body of *Australorbis*, **Barth & Jansen (1)**; Technique for sampling the fauna of grassland in Tiree, Argyll, **Boyd, J. M.**; *Crassostrea* culture methods in Hong Kong, **Bromhall, J. D.**; Conventions and techniques employed in the study of Cretaceous ammonites, **Casey, R. (1)**; Laboratory maintenance of *Littorina pintado*, **Chu & Ryan**; Transport and laboratory culture of snail intermediates of *Schistosoma*, **Claugher, D.**; Methods of measuring and recording oxygen pumping rate of oysters, **Collier, A.**; Features used in the correct examination of a species, **Eales, N. B. (3)**; Molluscicidal activity of NaPCP laboratory and field tests on *Galba truncatula*, **Enigk & Düwel**; Preparation of *Patella* phosphatides, **Etienne & Kahane**; Methods used in sampling the distribution of shellfish in the " Ria de Vigo ", **Figueras, A. (2)**; A new technique for the colorimetric determination of glycogen in marine molluscs using the anthrone reagent, **Fraga, F. (1)**; On the preparation of radulae, **Fritchman, II, H. K.**; Methods used in the study and detection of dehydrogenase activity in the oyster, **Fujiya, M. (1)**; Polarographic studies of molluscan " meat ", **Fukushima & Okada**; Ganglion extirpation in *Limnaea stagnalis*, **Hekstra & Lever**; Apparatus suitable for transmitting hydrodynamic sound waves in a tank used to study hearing in the octopus, **Hubbard, S. J.**; Collecting methods for gastropods, **Knight, C. B.**; Methods of

measuring the internal volume of shells, **Kornicker, L. S.**; Techniques used in studying the chemical content of molluscs, **López-Benito, M. (1)**; Reduction of powering requirements of soft-shelled clam dredging, **Manning & McIntosh**; A rapid method for preparing mounts of snail genitalia, **Michelson, E. H. (1)**; Maintenance of *Australorbis glabratus* in experimental aquaria, **Moore, D. V.**; Laboratory rearing and maintenance of *Bulinus truncatus*, **Najarian, H. H.**; Methods of application of molluscicides in bilharziasis control, **Paulini, E.**; Development of bioassay methods, **Pearson, Pomeroy & McKee (2)**; Construction of equipment for isolating large numbers of gastropods, **Penner, L. R.**; Technique for anaesthetising *Helix pomatia*, **Ripplinger & Joly**; Rearing of *Oncomelania formosana* in individual culture dishes, **Roth, A. A.**; Marking techniques for estimating numbers and individual ranges in land animals, **Sacchi, C. F. (1)**; *Sepia* traps from the Adriatic, **Schmidt, H.**; Ratio of conchyolin to calcium in *Mytilus perna* shell used to date shell middens, **Schoute-Vanneck, C. A.**;; For separation and isolation in mass of individual cell types from *Spisula* embryos, **Strittmatter, C. F. & P.**; Methods procedures and measurements used in the terminology of bellerophontacean shells, **Yochelson, E. L. (2)**;; For the study of live developmental stages of *Neomenia*, **Thompson, T. E. (3)**; Maintenance of oysters for laboratory experiments, **Tripp, M. R.**; Methods of sampling the bottom fauna of Airisto sound, Finland, **Tulkki, P.**; Mounting minute radulae, **Turner, R. D. (1)**; Collecting shells in all habitats, **Voss, G. L. (2)**; Maintenance of a marine snail in the laboratory, **Wagner, A.**; Habits and biology of the edible molluscs, **Waugh, G. D.**; Choice of snail sampling techniques, **Webbe, G.**; Tests for the presence and localization of chitin in molluscs, **Winkler, L. R.**; Trawling techniques in deep sea trenchs and hadal regions, **Wolff, T.**; Quantitative sampling, **Wurtz, C. B.**; Techniques of mollusc zonation in Texas Cretaceous, **Young, K.**; Formulation of problems and methods used in memory experiments with *Octopus*, **Young, J. Z. (3)**.

ZOOGEOGRAPHY

Acclimatisation, Migration and Dispersal.—Distribution of *Strombus*, **Abbott, R. T. (5)**; Distribution of the squid between the English Channel, The Azores and Canary Islands, **Baker, A. de C.**; Biology, ecology and geographical distribution of shipworms, **Carpine, C.**; Geographical distribution of *Aplysia*, **Eales, N. B. (3)**; Spread of *Rapana bezoar* from the far East to the Black Sea. **Fischer-Piette, E. (1)**; Distribution of abalones, **Gilmore, R. M.**; World distribution of the fresh water pearl mussel, **Hendelberg, J.**; Distribution and forms of *Clausilia dubia* Drap. **Klemm, W. (1)**; Migration and breeding in Japanese species of Littorinidae, **Kojima, Y.**; Fossil lamellibranchs and gastropods, **Korobkov, I. A., (3)**; Origin of the Pacific Island molluscan fauna, **Ladd, H. S. (1)**; Origin and migration of *Thais lapillus*, **Malatesta, A. (1)**; Spread of *Hydrobia* along the Mediterranean coasts, **Mars & Rebecq**; Distribution of benthos in the Bering Sea, **Neumann, A. A.**; Quantitative distribution of *Mytilus* along the eastern Crimean coast, **Nikitin, V. N.**; *Strophocheilus lichtensteini* Albers, **Pain, T. (1)**; Zoogeography of *Cypraea pantherina*, **Schilder, F. A. (4)**; Influence of changed environments and transportation of mollusc shells, Rhone delta, **Straaten, L. M. J. U. van**; Inquiry into the distribution of *Pisidium ultramontanum*, **Taylor, D. W. (1)**; *Dreissena polymorpha* spread in Estonia from Pärnu to L. Peipsi, **Timm, T.**; Factors governing *Viviparus fasciatus* distribution in the Konfederatka pool, **Wojciechowska & Trojan**; Study of fossil and recent Euthyneura with localities, **Zilch, A. (3)**.

Europe.—Terrestrial and freshwater Molluscs from Catalũna, **Altimira, C.**; Lamellibranchia of the sand and mud on Gann Flat, Dale, Pembs, **Bassindale & Clark**; *Cochlicella acuta* from the wooded Goblin Combe, (ST 461655), **Bird, H. W.**; *Cochlodina* spp. in Czechoslovakia and Silesia, **Brabenec & Mácha**; Opisthobranchia in the Bay of Villefranche, **Haefelfinger, H-R, (2)**; *Pseudamnicola confusa* distribution in the Rhine and Meuse delta region, **Hartog, C. d.**; *Margaritifera* in Sweden, **Hendelberg, J.**; *Laciniaria* (*Pseudalinda*) *riloensis* in N. Moravia, **Hudec, Lošek & Mácha**; *Pagodulina pagodula* distribution in Poland and neighbouring countries, **Jackiewicz and Rafalski**; Land, freshwater and brackish water snails from Schleswig-Holstein, **Jaeckel, S. G.A. (2)**; Frequency of *Galba truncatula* in varying pH's in Slovakia, **Kastàk, V.**; European distribution of *Pisidium*, **Kuiper, J. G. J. (3)**; Mollusca from Airisto Sound Finland, **Tulkki, P.**; Mollusca of Bulgaria, **Urbański, J. (1)**; New landsnails from Bulgaria, **Urbański, J. (2)**; A new *Delima* from Lake Ochrid, Yugoslavia, **Urbański, J. (3)**; Study of Bulgarian Clausiliidae, **Urbański, J. (4)**; Distribution of anthropochorous gastropods in Sweden, **Walden, H. W.**;

Africa.—Mollusca from mainly arid areas of N. Kenya, Ethiopia, Somaliland, and Arabia, **Verdcourt, B. (10)**.

Australasia.—Alterations in range of marine molluscs in South Australia, **Cotton, B. C. (2)**.

Asia.—Natural distribution and culture beds of *Anadara granosa* in Malaya, **Pathansali & Soong**; Distribution of troglobionts in Japan. **Torii, H.**

North America.—Range of *Macrocallista* from N. Carolina to Florida and the Gulf of Mexico, **Akin & Humm**; Abalones of California, **Cox, K. W.**; Notes relative to stations, frequency and number of genera and species of land snails collected from Doe Run Creek, Meade Co. Kentucky, **Kaplan & Minckley**; Routes of migration of non-marine Mollusca in the Pleistocene of Ohio, **La Rocque, A. (2)**; Opisthobranchs from American Atlantic warm waters, **Marcus, Ev. & Er. (3)**; Cretaceous oysters, southwestern North America, **Stenzel, H. B.**

South America.—Abundance of *Australorbis* in Vitoria and its seasonal variation in Brazil, **Pinotti, Rey, Aragão et al**; Distribution of Pupillidae *Pupisoma* in Argentina, **Scott, M. I. H. (2)**.

General Lists and Catalogues.—List of recognised taxa of *Strombus*, **Abbott, R. T. (5)**; Check list plus habitat notes of molluscs from Cape D'Aquilar Hong Kong Island, **Adal, M. N.**; Catalogue of species of *Thapsia*, **Adam, W. (5)**; Mollusca and their localities from the new collection of the Hungarian Natural History Museum, **Agócsy & Pócs**; List of shells collected in Surinam, **Altena, C. O. v. R. (3)**; Mollusca of Isole Pelagie, Mediterranean, **Alzona, C.**; Additions to the list of fossils from the Hunton Group Oklahoma, **Amsden, T. W.**; List of Mollusca from the upper Oligocene of Schleswig-Holstein, **Anderson, H-J. (3)**; List of land molluscs of Kitayama-Kyō, Wakayama Prefecture, Japan, **Azuma, M.**; Spanish Eocene Mollusca, **Bataller, J. R. (3)**; Some molluscs from Manitoba, Canada, **Beetle, D. E. (1)**; Wyoming, Albany County records, **Beetle, D. E. (4)**; Marine Mollusca from around Jericho, prehistoric ecology, **Biggs, H. E. J.**; Anotated list of shells collected during 1958 and 1959 at Ras Tanura, Persian Gulf, **Biggs & Grantier**; List of Mollusca of Minas Basin and Minas Channel, **Bousfield and Leim**; Catalogue of the type and figured specimens in the Paleontological Research Institution New York, **Brann & Kent**; Interesting molluscs collected in the coastal plains of Texas near

Sinton, **Branson, B. A.**; Mississippian species of *Conocardium*, **Branson, C. C.** (1); Established and introduced species in Hawaiian waters, **Brock, V. E.**; Checklist of Hawaiian marine Gastropoda, **Bryan jr., E. H.**; Catalogue of recent and fossil Olividae, **Burch, J. Q. & R. L.** (2); Devonian—Pleistocene molluscs, Colombia, **Bürgl, H.**; Land Mollusca from S.E. Walcheren before and after the inundation caused by the bombing of the dyke, **Butot, L. J. M.** (1); Mollusca of Marken Island (Zuiderzee), **Butot, L. J. M.** (2); Recent Mollusca described by Wesley Newcomb. with original citations and type localities, **Clarke, A. H.** (2); Catalogue of species and varieties of little known lamellibranchs and Ammonites from Morocco, **Colo & Petitot** (1) & (2); Miocene Mollusca from Cagliari Italy, **Comaschi Caria, I.**; Australian species of Haliotidae with 20 figures, **Cotton, B. C.** (4); Cerithiidae from Tropical Australia and the Indo Pacific 20 figs., **Cotton, B. C.** (5); Review, taxonomy, list and figs. of Australian Strombidae, **Cotton, B. C.** (6); Cassididae of Australian waters, **Cotton, B. C.** (7); Australian Naticidae, figs., localities and descriptions, **Cotton, B. C.** (8); Australian Olividae, rice shells and Ancillas, **Cotton, B. C.** (9); Australian Nassariidae their distribution and nomenclature, **Cotton, B. C.** (10); Australian Muricidae, figs and nomenclature, distribution records, **Cotton, B. C.** (11); Australian Buccinidae list, localities and figs., **Cotton, B. C.** (13); Australian Fasciolariinae and Fusininae, figs, nomenclature and localities, **Cotton, B. C.** (14); Australian Mitridae, nomenclature figs., localities, **Cotton, B. C.** (15); Recent and Tertiary Australian Potamididae nomenclature, **Cotton, B. C.** (16); Carboniferous *Goniatites* from Portugal, **Delépine, G.**; Checklist of Chatham Islands marine molluscs, **Dell, R. K.**; Mollusca from Sainte-Baume forest, **Devidts, J.**; Geological time scales of lamellibranch families, **Eberzin, A. G. [in Orlov]**; Marine infaunal benthos collected in Arctic N. America, **Ellis, D. V.**; Pleistocene molluscs from the Bay of California, Mexico, **Emerson, W. K.** (2); Mollusca from Afognak and Sitkalidak Islands, Kodiak Group Alaska, **Eyerdam, W. J.** (2); Cretaceous lamellibranchs from the coal fields of New Caledonia, **Freneix, S.** (1); Lists and review of molluscs from the Mecsek Mt. S. Hungary, **Gebhardt, A.**; Mollusca of the western coasts of the Black Sea, **Grossu & Cărăuşu**; Miocene Mollusca from Viśnjica, **Grubic, D.**; Carboniferous fossils hitherto unknown from the Bardo Mts. L. Silesia, **Gunia & Górecka**; Non-Marine Mollusca from British Honduras, **Haas & Solem**; Japanese shells described by A. A. Gould, **Habe, T.** (1); List of bivalves deposited in Tanabe Bay, Japan, **Habe, T.** (5); Catalogue of opisthobranchs from the region of Villefranche-sur-Mer, **Haefelfinger, H-R.** (2); Check list of fossil Mollusca from the Crescent City and Scotia areas, Del Norte and Humboldt counties [etc.], **Hall C. A.**; Faunal list of the Blue Lias of Dorset and Glamorgan, **Hallam, A.** (1); Gastropoda and Pelecypoda in the region of Pegnitz, Germany, **Häsślein, L.**; Mollusca from a cave near Bamberg, **Heller, F.** (1); Interglacial deposit molluscs from Germany, **Heller, F.** (2); Gastropoda of Clipperton Island, **Hertlein & Allison**; Pleistocene Molluscan fauna of S.W. Kansas, **Hibbard & Taylor**; Miocene fauna of Upper Austria, **Hölzl, O.**; Generic names for Ammonoidea published during the period 1758–1954, **Howarth, M. K.**; Land snails in beach drift in Texas, **Hubricht, L.** (1); Gastropods from Moldavia, **Huşanu, O.**; Mollusca of the Bulgarian coasts of the Black Sea, **Kaneva-Abadjieva, V.** (2); Opisthobranch molluscs from Queensland, **Kenny, R.**; Catalogue of species of Caecidae and Chemnitzidae described by de Folin, **Kisch, B. S.**; Catalogue of Austrian Gastropoda and some Pelecypoda, **Klemm, W.** (3); Miocene Mollusca from Vienna, **Kühn & Schaffer**; Georgian (U.S.S.R.) Miocene Mollusca, **Kvaliashvili, G. A.** (2); Geological timescale of ammonite families, **Luppov & Drushchitz [in Orlov]**; Cephalopoda at Blanes Laboratory, Spain, **Morales, E.** (1); Checklist of macroscopic troglobites of the United States, **Nicholas, G.**; Pleistocene Mollusca, S. Kantô, Japan, **Ogose, S.** (1); Pelecypoda and Gastropoda collected off the coast of Brazil, **Oliveira, M. P. de**; Molluscan fossils from the Tertiary of Abukuma Mountainland, **Omori, M.**; Miocene fauna of E. Czechoslovakia, **Ondrejíčková, A.**; Mollusca from Inhaca Island Mozambique, **Paes da Franca, M. de L.** (1); Mollusca from Angola, **Paes da Franca, M. de L.** (2); Freshwater mussels from the Angel Site, Vanderburgh Co. Indiana 1939–1959, **Parmalee, P. W.**; Geological range of Gastropod families, **Pchelintzev & Korobkov [in Orlov]**; Mio-Pliocene Mollusca from Italy, **Petrucci, F.**; Mollusca from the upper reaches of the Danube, **Pintér, I.**; Catalogue of Mollusca from the Antarctic and subantarctic, **Powell, A. W. B.**; Gastropod and scaphopod types from G. Brocchi's fossil Apennine collection, **Ronchetti, C. R.** (2); G. Brocchi types of fossil shells from Apennines, **Ronchetti, C. R.** (3); Calabrian Mollusca from Castrocaro, near Forli, **Ruggieri, G.**; Fossil and recent pulmonates and prosobranchs on the Isle of Ventotene, **Sacchi, C. F.** (2); Faunal lists for the "étangs" Vaccarès, Fournelet and Imperial in the Rhône delta, **Schachter, D.**; Cowries of Mauritius, revised, **Schilder, F. A.** (3); Fossil brackish water Mollusca, **Seneš, J.** (1); Systematic List of Shells collected in New Caledonia by T. D. A. Cockerell in 1928, **Solem, A.** (5); Mollusca in Lake Ohrid and in the adjacent waters, **Stanković, S.**; Mollusca from the fishery grounds of Alexandria, **Steuer, A.**; List of species after a red tide in Lower California, **Stohler, R.** (1); Mollusca of the Rhone delta, **Straaten, L. M. J. U. van**; Supplementary list of marine shells of Terschelling, **Tanis & de Vries**; Alphabetically arranged list of Mollusca in the Pavlovic collection, Beograd Museum, pp. 59–62, **Tomić, V.**; Caribbean species of *Truncatella*, **Torre, A. de la**; German Cretaceous Mollusca, **Tröger & Wolf**; Late Pleistocene Mollusca from the west side of Bahia San Quintin Mexico, **Valentine, J. W.** (1); Mollusca of ponds at Hámor, Hungary, **Vasarhelyi, I.**; Urocyclidae described from East Africa, **Verdcourt, B.** (1); East African slugs of the family Urocyclidae, **Verdcourt, B.** (2); East African Veronicellidae records, **Verdcourt, B.** (7); Marine Mollusca from the Pleistocene of Vancouver Island, **Wagner, F. J. E.**; Mollusca from the Cretaceous of S. Alberta, **Warren, P. S.**; Land snails of Peru, **Weyrauch, W. K.** (2); Mollusca of Kongsbjerg & Hörselberg, **Zeissler, H.** (1); Shells from Tharandt near Dresden, **Zeissler, H.** (2).

DISTRIBUTION

(A) Geographical

(a) FOSSIL, LAND AND FRESHWATER

PALAEARCTIC REGION

Europe.—Marine Carboniferous, **Elias, M. K.**

Iceland.—Fossiliferous xenoliths in the Móberg formation, S. Iceland, **Áskelsson, J.**

Norway.—Glochidia of *Unio* and *Anodonta* on fish at Tvärminne Zoological Station, Brännskär, **Malmberg, G.**; The Middle Ordovician of the Oslo region, **Soot-Ryen, H. & T.**

Sweden.—Populations of *Margaritifera* in Pärlälven, Arctic Sweden, **Hendelberg, J.**; Aptian ammonites, **Reyment, R. A.** (2); Terrestrial Gastropoda, ecological and anatomical study, **Walden, H. W.**

British Isles.—Pliocene deposits in particular the Coralline Crag of Suffolk, **Baden-Powell, D. F. W.**; Lower Carboniferous non-marine lamellibranchs from East Fife, Scotland, **Bennison, G. M.**; Differences in fauna of grazed and ungrazed grassland in Tiree, Argyll, **Boyd, J. M.**; A review of Devon and Cornwall goniatite zones, **Butcher & Hodson**; The lower Greensand of the S.E. of England, **Casey, R.** (1); Fossilized intestines of a gastropod from the Lower Cretaceous of Kent and Surrey, **Casey, R.** (2); A new ammonite genus from the Lower Cretaceous of S. E. England, **Casey, R.** (3); British Cenomanian (Cretaceous) Ammonite zones, **Casey, R.** (4); *Cepaea nemoralis* from Co. Sligo Ireland, **Cook & Peake**; The British Cretaceous Pleurotomariidae, **Cox, L. R.** (2); Preservation of moulds of the intestine of *Nuculana* from the Lias of Gloucestershire, **Cox, L. R.** (5); Non-marine Carboniferous lamellibranch palaeoecology, **Eagar, R. M. C.**; Jurassic shell bed from Raasay, Inner Hebrides, **Forsyth, I. H.**; *Columella edentula* Drap. and *Vertigo antivertigo* Drap. in West Sussex, **Goodchild, M.**; *Hygromia hispida* (L.) at Stromness Orkney, **Groundwater, W.**; Blue Lias of Dorset and Glamorgan, **Hallam, A.** (1); Devonian ammonoids from N.W. Dartmoor, Devonshire, **House, M. R.** (1); Devonian ammonites from Pentonwarra Point, Trevone N. Cornwall, **House, M. R.** (2); Non marine Upper Carboniferous lamellibranchs from Pembrokeshire, Wales, **Jenkins, T. B. H.**; Interglacial tufa fauna from Hitchin, Herts., **Kerney, M. P.**; *Planorbis* (*Anisus*) *vorticulus* near Staines, Middx., **Kerney & May**; Further records of *Potamopyrgus jenkinsi* (E.A.Sm.) Scotland, **Kevan, D. K.**; Ludlovian succession of British shelly faunas, **Lawson, J. D.**; *Hygromia subvirescens* in Pembrokeshire, **Lloyd-Evans, L.**; Mollusca of Wirral, Cheshire, **McMillan, N.** [F.] (1); Fauna of The Island, Greenisland Co. Antrim, **McMillan, N.** [F.] (2); *Hygromia hispida* from Hoy, Orkney, **McMillan, N. F.** (3); Non marine Mollusca, N. E. Scotland, **McMillan, N. F.** (4); *Monacha cantiana* (Mont.) in Fife, **McMillan, N. F.** (5); *Potamopyrgus jenkinsi* in Orkney, **McMillan, N. F.** (6); *Hygromia liberta* (Wester.) and *H. hispida* (L.) living together in Berkshire, **Quick, H. E.** (1); Occurrence of *Limax* (*Lehmannia*) *poirieri* Mabille,at Reading, Berkshire, **Quick, H. E.** (2); *Hygromia subrufescens* (Miller) and *H. subvirescens* (Bellamy) living together at Blackstone Point, S. Devon, **Quick, H. E.** (3); Description of British slugs from the Testacellidae, Arionidae and Limacidae, **Quick, H. E.** (4); Ammonite and trilobite faunas of the Devonian-Carboniferous boundary beds from Launceston Cornwall, **Selwood, E. B.**; Late Pleistocene deposits at Selsey (Sussex) and Stone (Hampshire), **West & Sparks**; *Anodonta minima* Müller in Monmouthshire, **Woodward, F. R.**

France.—Occurrence of *Xeropicta* in France compared with Croatian forms, **Altena, C. O. v. R.** (2); Subfossil *Anodonta* value in a grotto at Aveyron, **Astre, G.**; *Plagioptychus* from the Cretaceous of Ariège, Pyrenees, **Astre & Baudelot**; Influence of the climate at Gravelines Northern France on hatching of *Cochlicella*, **Boulangé & Hoestlandt**; Liassic ammonites, Gard, **Brun, P. de**; Jurassic rocks from the Besançon region, **Bulle & Rollet**; Miocene *Amussium* from eastern Provence, **Catzigras, F.**, Palaeozoic of the Eastern Pyrenees, **Cavet, P.**; Namurian goniatites from the north, **Chalard, J.** (1); Carboniferous *Hudsonoceras*, **Chalard, J.** (2); Turonian *Vascoceras* from Blanc-Nez, N. France, **Destombes & Sornay**; Mollusca from Sainte-Baume Forest, **Devidts, J.**; Miocene Pelecypoda, Loire Basin, **Dollfus & Dautzenberg**; Jurassic Tulitidae from Crussol and Trept, **Enay, R.** (1); Jurassic molluscs from the Middle Jura at Mt. Colomby-de-Gex and Champfromier, **Enay, R.** (2); Upper Jurassic of Merlerault and Vimontiers, Normandy, **Feray, G.**; Liassic ammonites from Arbois region, Jura, **François & Lehmann**; Liassic fauna from Salins-les-Bains, **Fuse, J.**; Miocene, Pliocene and Pleistocene Gastropoda, Loire Basin, **Glibert, M.** (2); Terrestrial Mollusca of the Rhone Delta, **Hoffmann & Bigot**; Upper Pliocene fauna of Roquebrune, **Iaworsky & Curti**; List of localities of *Hydrobia jenkinsi* together with associated species, **Lucas, A.**; Recent faunal modifications in the Étang de Berre, in the Bouches-du-Rhône, **Mars, P.** (1); Fossil and recent littoral Hydrobiidae, **Mars, P.** (2); Spread of *Hydrobia* along the Mediterranean coasts of France and Spain, **Mars & Rebecq**; New Jurassic ammonites from the west of the Paris basin, **Maubeuge, P. L.**; Palaeontology of the Upper Lias from Saint-Claude, **Mercier, G.**; Miocene Mollusca from Mirabeau (Vaucluse), **Mongin, D.** A Cretaceous ammonite in the region of Grenoble, **Moret, L.**; Cretaceous ammonites from near Annecy (Haute-Savoie), **Moret & Deleau**; Evolution of the fauna in several "etangs" in the Rhône delta, **Schachter, D.**; *Ludwigella concava* zone and fossil Mollusca from Alsace, **Shirardin, J.**; Jurassic facies variations around Belfort & Besançon, Alsace, **Théobald, N.**; Jurassic ammonites from Besançon, Belfort & Vesoul, **Théobald & Bourquin**; Toarcian and Aalenian from Obernai (Lower Rhine), **Theobald & Moine**; Jurrassic ammonites from Bourgogne and near Dijon, **Tintant, H.** (1); New Jurassic ammonite from Andelot-en-Montagne (Jura), **Tintant, H.** (2); Late Pleistocene deposits from Arromanches on the Normandy coast, **West & Sparks.**

Belgium.—Terrestrial and freshwater Mollusca, **Adam, W.** (1); Carboniferous palaeontology of the Berwinne and Geule Valleys, **Bouckaert, J.**; Gastropods from the Miocene, Pliocene and Pleistocene, **Glibert, M.** (2); Carboniferous *Homoceras* from the Val Dieu-Asse region, Liège, **Lambrecht & Leckwijck**; Cretaceous belemnites from N. E. Belgium, **Schmid, F.** (1); A new cave dwelling mollusc in "Belle Roche" cave, Comblain-au-Pont (Liège), **Tercafs, R. R.** (1).

Holland.—Slime tracks and patches on trees at Oegstgeest near Leiden proved to be made by *Limax maximus*, **Altena, C. O. v. R.** (1); Mollusca of the Nature Reserve at Rammekenshoek, land and freshwater species, **Butot, L. J. M.** (1); Molluscan fauna of the island of Marken in the former Zuiderzee, **Butot, L. J. M.** (2); *Pseudamnicola confusa* from Biesbosch, **Butot, L. J. M.** (3); *Leucophytia bidentata* in Zeeland, **Metz, Vogel & Wolff.**

Spain.—Miocene Mollusca from Vallés, **Bataller, J. R.** (1); Quaternary *Purpura* from Valencia, **Bataller, J. R.** (2); Eocene Mollusca, **Bataller, J. R.** (3); Miocene of the Barcelona region, **Bataller, J. R.** (4); *Liotia* from the Lutetian of Ametlla de Ager, **Bataller, J. R.** (5); Catalan Miocene gastropods, **Bofill & Bataller**; Pliocene Mollusca of Llobregat, Barcelona, **Gillet S.** (1); Upper Miocene to Quaternary Mollusca, **Jodot, P.**; New Devonian ammonites, Cantabrica Mts., **Kullmann, J.**; Spread of *Hydrobia* along Mediterranean coasts of France and Spain, **Mars & Rebecq**; Jurassic palaeogeography from the Cordillieras, Andalusia, **Peyre, Y.**; Terrestrial molluscs from Spain, N. Africa and Italy, **Sacchi, C. F.** (3); Triassic molluscs, Catalonia, **Virgili, C.**; Mesozoic nautiloids of the Iberian peninsula, **Wiedmann, J.**

Portugal.—Carboniferous *Goniatites*, **Delépine, G.**; Jurassic ammonites from N. of Tage, **Perrot, C.**; Jurassic cephalopods from N. of Tage, **Perrot & Mouterde**; Mollusca from Muge, **Roche & Veiga Ferreira**; Lower Callovian stratigraphy, **Ruget-Perrot, C.** (1); Stratigraphy

of the Lusitanian (Jurassic), **Ruget-Perrot, C.** (2); Cretaceous *Exogyra* from Coimbra and Figueira da Foz, **Soares, A. E.**

Italy.—Miocene Mollusca from Cagliari, **Comaschi Caria I.**; Variability of *Helicella profuga* in Lake Venezia, **De Joanna & Sacchi**; Calabrian Molluscs from Castrovillari (Cosenza), **Faillace, C.**; Miocene Mollusca from Ponsano S.E. of Volterra, **Giannini & Tongiorgi**; Mollusca from Messina region and their affinities with E. European forms, **Gillet, S.** (4); Development of hydrophytic colonies in Lake Trasimeno, **Giovanni, M. V. di**; Triassic gastropods from Cortina d' Ampezzo, **Leonardi & Fiscon**; Triassic fauna of the Valley of the Fiemme near Trentino, **Leonardi, P.**; Macrofauna in the Eocene fossil locality of Mount Postale in Venetia, **Malaroda, R.**; Miocene Mollusca from the Sangro Valley, **Malatesta, A.** (2); Miocene Mollusca from Montebello, Rimini, **Moroni, M. A.** (1); Sahelian Mollusca from the Republic of San Marino, **Moroni, M. A.** (2); Mio-Pliocene boundary molluscs from the hills between the rivers Tara and Recchio (Parma), **Petrucci, F.**; New Noric fossils from Val Cancano, **Pozzi, R.** (1); Liassic molluscs, Retiche alps, **Pozzi, R.** (2); Triassic Lamellibranchia from Lombardy, **Ronchetti, C. R.** (1); Gastropod and scaphopod types from G. Brocchi's fossil Apennine collection, **Ronchetti, C. R.** (2); Types of Apennine fossil shells of G. Brocchi, **Ronchetti, C. R.** (3); Cephalopoda from Esino (Ladinic) formation Lombardy, **Ronchetti, C. R.** (4); Calabrian Mollusca from Castrocaro near Forli, **Ruggieri, G.**; Pliocene Mollusca from Altavilla, **Ruggieri, Bruno & Curti**; Pliocene Mollusca from Altavilla, **Ruggieri & Curti**; Biogeography of terrestrial molluscs of N. Africa and Italy, **Sacchi, C. F.** (3); Mesozoic Mollusca, **Selli, R.**; Oligocene corals and pelecypods from Ovada (Piemonte), **Sestini, N. F.**; *Bythinella lacheineri* from the Province of Como, **Toffoletto, F.**; Liassic ammonites from the Alpes Apouanes, **Trevisan, L.**; Land and freshwater molluscs from the Dolomites, **Venmans, L. A. W. C.**; Tortonian Mollusca from the Colle di Vigoleno (Piacenza), **Venzo, S.** (2).

Switzerland.—Liassic ammonites from the Langeneckgrat, S.W. of Thun, **Donovan, D. T.**

Germany.—Revision of Tertiary Naticacea, **Anderson, H.-J.** (1); Tertiary Littorinacea, Rissoacea and Cerithiacea, **Anderson, H.-J.** (2); Upper Oligocene in Schleswig-Holstein, **Anderson, H.-J.** (3); Cretaceous fossils from Mellendorf north of Hanover, **Bartenstein, H.**; Cretaceous *Inoceramus*, **Dietze, H.**; A new gastropod from the Upper Miocene of Schleswig-Holstein, **Dittmer, E.**; Liassic ammonites, **Freyberg, B. v.**; Study of Jurassic Cephalopoda, **Geyer, O. F.**; Ecological study of Mollusca from the Pegnitz region, **Hässlein, L.**; Diluvial paleontology of a cave near Bamberg, **Heller, F.** (1); Interglacial Mollusca from Lobsing, **Heller, F.** (2); *Dactylioceras tenuicostatum* zone in N.W. and S.W. Germany, **Hoffman & Martin**; Devonian Mollusca from Planitz near Zwickau, **Hösel, G.**; Photonegative young in the Triassic *Lima lineata*, **Jefferies, R. P. S.**; Mollusca of Bopfingen area, **Münzing, K.**; Muschelkalk (Triassic) stratigraphy, **Rutte, E.**; East Thüringen goniatite from the Upper Devonian, **Schindewolf, O. H.** (2); *Iphigena* around the East Coast of N. Schleswig, **Schlesch & Jaeckel**; Giant Jurassic Ammonites, **Schnittmann, F. X.**; Cretaceous Mollusca from Dresden-Strehlen, **Tröger & Wolf**; A new Triassic (Muschelkalk) ammonite, **Wunsch, L. P.**; Ammonites in the Cretaceous of Hainberg N.W. Neuburg/Donau, **Zeiss, A.** (2); Shells from Tharandt, E. Germany, **Zeissler, H.** (2); Freshwater molluscs from Weimar, **Zeissler, H.** (4).

Denmark.—Cretaceous (Danian) Mollusca, **Rosenkrantz, A.**; Occurrence of *Vertigo alpestris* Alder, **Zeissler, H.** (3).

Austria.—Miocene fauna of Upper Austria and the Vienna basin, **Hölzl, O.**; *Clausilia dubia* in the Eastern Alps, variations and new subspecies, figs., **Klemm, W.** (1); Austrian Gastropoda and some Pelecypoda, distribution notes, **Klemm, W.** (3); Miocene Mollusca from Hernals, Vienna, **Kühn & Schaffer**; *Sepia vindobonensis* from the Tortonian, **Schaffer, H.**

Hungary.—Lists and notes on distribution of Mollusca **Agócsy & Pőcs**; Pliocene Mollusca, **Apostol, L.**; Tortonian Mollusca from Szokolya N. Hungary, **Báldi, T.**; Oligocene Mollusca from Egercsehi-Ózd, **Csepreghy-Meznerics, I.** (1); Miocene Pectinidae and their biostratigraphical importance, **Csepreghy-Meznerics, I.** (2); Mollusca from the Mecsek Mountain, South Hungary, **Gebhardt, A.**; New Liassic *Liparoceras* from Urkut, Bakony Mts., Transdanubia, **Géczy, B.** (2); Abnormal Liassic ammonite from the Gerecse Mts., **Jámbor, Á.**; Jurassic ammonites from the Villányer Mts., **Kaszap, A.**; Gastropoda of the Bakony Mts., **Pápp, J.**; Mollusca from the Danube and its tributaries in Hungary, **Pintér, I.**; New Miocene Mollusca from N. Hungary, **Strausz, L.** (1); New Miocene Mollusca, **Strausz, L.** (2); Mollusca of ponds at Hámor, **Vasarhelyi, I.**

Czechoslovakia.—Use of *Tentaculites* in Devonian stratigraphy, **Bouček & Prantl**; Carboniferous Mollusca from Hranice, Moravia, **Chlupáč, I.**; Miocene Mollusca from Winterberg, Bohemia, **Čtyroký, P.**; Mollusca of limestone quarries in the Slezské region of North Czechoslovakia, **Flasar, I.**; Early Paleozoic pelecypods from Osek near Rokycany and Šárka near Prague, **Horný, R.**; *Laciniaria* (*Pseudalinda*) *riloensis* in N. Moravia, **Hudec, Ložek & Mácha**; Shell incrustations on *Anodonta* in ponds near Homole and Strašnice, **Komárek, K.**; Revision of the Carboniferous Nuculanidae from the Ostrava-Karviná district, **Kumpera, Prantl & Růžička**; Mollusca exposed by erosion of breccia near Muráň, **Ložek, V.** (1); Czechoslovakian malacology, **Ložek, V.** (2); Mollusca of the Slezské Mts., **Mácha, S.** (1); Submarine slide and its macrofauna in the Palaeogene of the Central Carpathians to the north of Čierna Hora and southwest of Vítaz in the Šariš Highland, **Marschalko & Volfova**; Hydrobiology of Lake Graeca and the Danube, **Nicolau, Popovici & Cristian**; Miocene fauna of Kaschauer Kessels (Košická Kotlina), **Ondrejičková, A.**; *Monophyllites aonis* from the Triassic of Východná, **Rakus, M.**; Miocene molluscs from near Sillein in the Waag river valley West Carpathians, **Seneš, J.** (2); Fossil Mollusca from the region of Kobeliarovo, Štitník and Nandráž, **Šuf, J.** (1); Palaeontology of fluvioglacial deposits of Ostrava, **Šuf, J.** (2); Molluscs from the Miocene of the eastern slopes of the "Slanské hory" mts., **Švagrovský, J.**; *Anodonta cellensis* from the eastern margin of Prague, **Táborský, K.**

Poland.—Occurrence of *Galba truncatula* in the basin of the River Barycz, **Bednarz, S.**; Eemian molluscs from a boring in Brachlewo, **Brodniewicz, I.** (1); Polish populations of *Pisidium moitessierianum*, **Brodniewicz, I.** (2); Experiments on respiratory activity in *Viviparus* from the R. Warta, **Czapska, M.**; *Margaritifera* in the Izerskie Mts. of Lower Silesia, **Dutkiewicz, J.**; Lower Carboniferous fossil fauna in the Bardo Mts. Wojbórz, Lower Silesia, **Gunia & Górecka**; *Pagodulina pagodula*, **Jackiewicz & Rafalski**; Jurassic Gastropoda of Sainte Croix Mts., **Karczewski, L.**; Lias pelecypods from the Święty Krzyż Mtns., **Kopik, J.**; Malmian ammonites, **Malinowska, L.**; Cretaceous ammonites from Lower Silesia, **Radwańska, Z.**; Population fluctuations of

Mollusca in the Konfederatka pool, Vistula, **Stańczykowska, A.** (1); Classification of *Viviparus fasciatus* in the Vistula region, **Stańczykowska, A.** (2); Protection necessary to preserve *Delima* (*Alpidelima*) *ornata* in Poland, **Wiktor, A.** (2); Description of *Boettgerilla vermiformis*, **Wiktor, A.** (3); Visean molluscs, **Zakowa, H.** (2).

Yugoslavia.—Cretaceous Mollusca from between Krivelj and Bučje, **Antonijević, I.**; Pliocene molluscs of the Kosovo basin, **Atanacković, M.**; Miocene fossils from S. Glina, **Eremija, M.**; Miocene Mollusca in the blue clays of Višnjica, **Grubić, D.**; The Ancylidae of Lake Ochrid, **Hubendick, B.** (2); Miocene Mollusca from the Mlava Basin, **Jovanović, D.**; New *Pisidium* in Lake Ochrid, **Kuiper, J. G. J.** (3); Ecological study of the mal waters at Zagorje, Hrvatska, **Matoničkin, I.**; Sarmatian and Pannonian Mollusca from S.E. of Belgrade, **Miletić-Spajić, O.**; Discovery of Landenian (Cretaceous) *Daonella* at Droškovac near Vareš, **Pavlović, P.**; Miocene Mollusca from the M. Kamenica area of East Serbia, **Popović, R.**; *Pseudamnicola* from Lake Ochrid with description of a new species, **Radoman, P.**; A new genus & species from Montenegro, figs., **Schütt, H.** (2); New *Hadziella*, Rab Island, **Schütt, H.** (3); Fauna of Lake Ochrid, **Stanković, S.**; Jurassic fossils from " Jerma " and Zvonačka Banja near the Yugoslavia—Bulgaria border, **Sučić, Z.**; Serbian and Macedonian Gastropoda forming P. S. Pavlovic's collection in Beograd Museum, **Tomić, V.**

Greece.—Cretaceous Mollusca, **Mitzopoulos, M. K.**

Roumania.—Belemnites in the region of Topal, Hîrşova region, Dobrogea, **Bărbulescu, A.**; Miocene Mollusca from Buituri, **Gertrude, R.**; *Pisidium* spp. discussed and figured, **Grossu, A. V.** (1); New species of *Daudebardia*, **Grossu, A. V.** (2); New genera and a revision of *Limax*, **Grossu & Lupu**; List of gastropods from Moldavia 22 of which are new to the province, **Huşanu, O.**; Fossil marine Mollusca from the Eocene near Cluj, **Ion, B. Z.**; Eocene Mollusca from Porcești near Sibiu (Hermannstadt), **Mészáros, N.**; Miocene Mollusca from the Teleajen valley between the villages of Coada Malului and Gura Vitioarei, **Pauliuc, M.**; *Inoceramus* fragments in the red clays of the Cernatu Valley, **Pauliuc, S.**; Jurassic and Cretaceous ammonites from the Svinita-Svinecea zone, **Răileanu & Pelin.**

Russia.—*Pisidium* spp. a general ecological study in Armenia, **Akramovskii, N. N.**; *Corbicula* and *Trigonia* from Suchan beds, Vladivostok area, **Aleksandri-Sadova, T. A.**; Miocene oyster beds, N.E. Ust Urt, Krasnovodsk peninsula and S. Tuarkyr uplands, **Aleksin & Merklin**; Molluscan fauna of Kuri, Mingechaur and Sabirabad, Azerbaidjan, **Aliev, A. D.** (1); Triassic Ammonoidea in the East Carpathians, **Andrusovova-Kollarova, V.**; Mollusca from the Miocene of Georgia, **Bagdasaryan, K. G.**; Fossil nautiloids from several localities in European and Asiatic Russia, **Balashov, E. G.** (1); Ordovician nautiloids from Mishina Gora (Pskov district), **Balashov, E. G.** (2); Devonian ammonoids from the Urals, **Bogoslovsky, B. I.**; Devonian *Hercynella* from the eastern limb of the Engane-pe uplift, Polar Urals, **Chernov, G. A.**; New Miocene *Spaniodontella* Georgia, **Chikovani, A. A.**; *Parmacella* in Russia, **Eberzin, A. G.** (1); New Pliocene Cardiidae, Ukraine and Georgia, **Eberzin, A. G.** (2); Cretaceous Mollusca from the Crimea and Carpathians, **Eristavi, M. S.**; *Atlanta* sp. nov. from the Miocene, Chernovitsk region, Ukraine, **Ghoretzkii & Burova**; New Tertiary Gastropoda and Pelecypoda, Aral Sea, **Ilyina, A. P.** (1); New Oligocene molluscs, N. E. Russia, **Ilyina, A. P.** (2); New Oligocene molluscs, Kazakhstan, **Ilyina, A. P.** (3); Oligocene Mollusca from Akhaltsikhe, Georgia, **Kacharava, I. V.**; Permian molluscs, north east U.S.S.R., **Kashirtzev, A. S.**; Miocene Mollusca from the Kaspi Mts. Georgia, **Kereselidze, D. G.**; Middle Miocene Mollusca of the Marmaroaksky depression, Trans-Carpathia, Ukraine, **Korobkov, I. A.** (1); New *Variamussium*, Armenia and Uzbekistan, **Korobkov, I. A.** (4); Palaeogene of the Amu-Darya, S.W. Aral Sea after recent discoveries of molluscs, **Korobkov & Makarova**, Silurian and Devonian pelecypods of the N.E. Pri-Balkhash, **Krasilova I. N.**; Miocene Mollusca from Georgia, **Kvaliashvili, G. A.** (2); Systematic study of Mollusca of the Crimea, **Likharev, I. M.** (1); Land molluscs of the Caucasian isthmus, **Likharev, I. M.** (2); New Cretaceous molluscs, Penzhinskaya Ghuba, N.E. Russia, **Liverovskaya, E. V.**; Devonian Coniconchia of the central and eastern regions, of the Russian platform, **Lyashenko, G. P.**; New Permian Pelecypoda, Kazakhstan, **Lyutkevich & Lobanova**; Paleogene *Nerinea* sp. nov. from the Crimea, **Makarenko, D. E.**; New Cretaceous, Pelecypoda and Gastropoda, West Siberia, **Martinson & Velikzhanina**; *Carychium minimum* from the Tertiary of Kirgiziya, **Matekin, P. V.**; Biostratigraphy of the Shashor horizon in the E. Carpathians, Ukraine, **Maximov, A. V.**; A new Oligocene cardiid from Kyzyl Kum desert, Uzbekskaya, **Merklin, R. L.**; Some new Ukrainian Tertiary Pectinidae, **Merklin & Rozhe**; *Sphaerium* and *Pisidium* from the Upper Volga dam, **Mitropolskii, V. I.**; Permian pelecypods in the Ural mountains, **Nelxina, P. E.**; *Dreissena polymorpha* Rybinsk region, Quaternary, **Novsky, V. A.**; Cretaceous *Trigonia* at Cape Khoy, Sakhalin, **Pergament, M. A.**; Mollusca and the distribution of fasciolasis in the Stalingrad Region, **Petrotchenko & Rudjakova**; New Jurassic *Psiloceras* Okhotsk sea area, **Polubotko & Chudoley**; New Triassic nautiloids, **Popov, Y. N.** (1); Upper Triassic ammonites and pelecypods of Frantz-Joseph land, **Popov, Y. N.** (2); The benthos biomass of the central and southern Caspian, **Romanova, N. N.**; Variation and systematic position of Miocene Nassidae from Moldavia, **Roshka, V. K.**; Cretaceous ammonites from the Uil, Bolshaya Khobda and Ilek river basins, W. Kazakhstan, **Saltykova & Shlezinger**; New *Myoporella*, Urals, Jurassic, **Saveliev, A. A.**; Lower and middle Carboniferous fossils from the basin of the Don, Ukraine, **Sergheeva, M. T.**; New Cretaceous *Trigonia* E. Urals, **Shcheglova-Borodina, O. N.**; New Tertiary nautiloids of the genus *Teichertia*, **Shimansky, V. N.** (1); Quaternary Mollusca from Obodnoye near the River Bug and the Desna/Siba watershed, Ukraine, **Shovkoplyas, V. N.**; Carboniferous Pelecypoda in the Donetz basin, Ukraine, (Lists), **Shul'gha, P. L.**; New Miocene Mollusca from Mangyshlak and Ustyurt, Kazakhstan, **Sidorova, N. P.** (2); Sarmatian mactrids of Mangyshlak and Ustyurt, **Sidorova, N. P.** (3); Lithuanian Gastropoda and Pelecypoda described and figured, **Sivickis, P.**; New Cretaceous pectinids from the Dniester river basin, **Sobetzky, V. A.**; Ecology of Cambrian hyolithids, Siberia, **Sysoev, V. A.** (2); New Pliocene *Viviparus*, Georgia, **Taboyakova, V. Y.** New Carboniferous Pelecypoda, **Yanishevskii, M. E.**; Eocene Pelecypoda of the Ukraine, **Zelinskaya, V. A.**; Miocene Mollusca from Georgia SSR, **Zhgenti, E. M.**.

Turkey.—Sarmatian fauna from ancient river beds near Tekirghiol, **Băcescu, M.**; Two new radiolitids from the upper Cretaceous, **Cox, L. R.** (3); Jurassic of the north east of Anatolia, **Granit & Tintant**; *Lymnaea truncatula* as the host of *Fasciola hepatica* in the Anatolian Plateau, **Güralp & Simms** (1); Molluscan fauna of Iznik lake, **Traut, W.**

Israel.—Mollusca from Jericho, **Biggs, H. E. J.**; Middle Triassic nautiloids in the Negev of southern Israel, **Kummel, B.** (3).

Iraq.—Problematicum from the Cretaceous, **Elliott, G. F.**

Iran.—Cretaceous Rudistes, **Nazemi & Grubic.**

Afghanistan.—Cretaceous Pelecypoda, **Yabe, Y.**

Arabia.—Upper Jurassic palaeontology in S.W. Arabia, **Staesche, K.** in **Schott, W.**

Africa, North.—Ammonite type species and varieties from Morocco, **Colo & Petitot, (1);** Little known type species and varieties of fossil lamellibranchs from Morocco, **Colo & Petitot (2);** Lamellibranchia from the Nubian sandstone series of Egypt, **Cox, L. R. (7);** Jurassic fauna of Garet el-Bellâa limestone N.W. Tripolitania, **Desio & Ronchetti;** Jurassic fossils from Northern Tripolitania, **Desio, Ronchetti & Invernizzi;** The Triassic of Northern Tripolitania and Southern Tunisia, **Desio, Ronchetti & Viganò;** Neogene and Quaternary Scaphopoda, **Fantinet, D.;** Triassic nautiloids from Sinai, Egypt, **Kummel, B. (3);** *Modiolopsis* from the Ordovician of the Sahara, **Legrand, Poueyto & Rouaix;** *Eremina* of N. and N.W. Africa figs., **Llabador, E.;** Biogeographical relations between N. African and Italian Terrestrial molluscs, **Sacchi, C. F. (3);** Lamellibranchs from Djebel Tebaga, Tunisia, **Termier, H & G. (1);** Endoparasites of Egyptian sheep, in particular fascioliosis, **Zaki, H.;** Cyrenaica, new land snails, **Zilch, A. (1).**

Mediterranean Islands.—Mollusca of the Isole Pelagie, **Alzona, C.;** Tirrenian molluscs, E. Sardinia, **Dieni, I.;** Pliocene gastropoda and pelecypods, Sardinia, **Dieni & Omenetto;** *Thais lapillus* in the Pleistocene of Sicily, **Malatesta, A. (1);** The effect on the fauna of Ventotene off Cape Miseno (Naples) of an insular environment and microevolution, **Sacchi, C. F. (2).**

ORIENTAL REGION AND EAST INDIES

India.—Permian ammonites and the Triassic fauna of the Central Himalayas, **Jeannet, A.;** *Gulella* sp. nov. from Orissa, **Ray, H. C.;** Unconfirmed reported occurrence of *Crioceras* in Cutch, **Sarkar, S. S. (1);** The age of *Acanthoceras* and *Romaniceras* in the Cretaceous, **Sarkar, S. S. (2);** Reported Cretaceous *Acanthoceras* from Cutch, **Sarkar, S. S. (3);** Mollusca from Rang Mahal excavations, **Wilkins, G. L.**

Chinese Subregion.—New Ordovician nautiloids from Inner Mongolia, **Chang, Z.;** Permian ammonoids from Kwangsi, **Chao, K.;** Pleistocene pelecypods from Wuhohsien, N. Anhwei, **Chow, M. M.;** Middle Palaeozoic of Korea and Northeast China, **Hamada, T.;** Pliocene and Pleistocene molluscs from Tungyüping in the Pescadores Islands, Taiwan, **Hayasaka, I. & S.;** Cambro-Ordovician faunas of South Korea, **Kobayashi, T. (1) & (2);** *Mongoloceras* new ammonite Permian, Mongolia, **Ruzhentzev, V. E. (2);** Land molluscs of Bach Long Vi (Nightingale) Island, Gulf of Tongking, S. China Sea, **Saurin, E.;** 9 unrecorded species of Mollusca from Korea, **Yoo, J. S.**

Thailand.—Jurassic pelecypods from West Thailand, **Hayami, I. (5);** Ordovician Mollusca, **Kobayashi, T. (3);** Triassic Halobiidae, **Kobayashi & Tokuyama (2);** Triassic ammonoids, **Kummel, B. (2).**

Malaya.—Note on land and freshwater species of Malaya and description of a new *Gyliotrachela*, **Jutting, W. S. S. v. B. (1);** Ordovician Mollusca from Malaya and Thailand, **Kobayashi, T. (3);** Triassic ammonoids, from Malaya, **Kummel, B. (4).**

Japan.—Pliocene *Patinopecten* from Kanagawa Pref., **Akiyama & Miyajima;** Mollusca from the Nakazato Pliocene formation in Yokoyama, Kanagawa Prefecture, **Aoki, N.;** Miocene molluscs from Shimokita peninsula, Aomori Prefecture, **Aoki, S.;** A new *Yamatochlamys* from Kitoyama-Kyo, fig., **Azuma, M.;** Pliocene Mollusca of N.E. Honshu, **Chinzei, K. (1);** *Fortipecten* from the Pliocene of Amori Prefecture, N.E. Japan, **Chinzei, K. (2);** Japanese shells described by A. A. Gould, **Habe, T. (1);** Nonmarine Mesozoic Mollusca from W. Chugoku & N. Kyushu, **Hase, A.;** Pelecypods from the Cretaceous of Hashiura Area, N.E. Japan, **Hayami, I. (1);** Jurassic Inoceramids, **Hayami, I. (2);** Lower Liassic gastropods from the Higashinagano formation, **Hayami, I. (3);** Liassic lamellibranchs from the Yamaguchi Prefecture, **Hayami, I. (4);** Upper Jurassic and lower Cretaceous pelecypods from N.E.Japan, **Hayami, Sugita & Nagumo;** New Permian *Foordiceras*, Kitakami Mts., **Hayasaka, I.;** Large-sized oysters from the Japanese Pleistocene and their paleoecological implications, **Hayasaka, S.;** Pleistocene marine fauna from Chita Peninsula Aichi Prefecture **Hayasaka & Iwai;** A new subsp. of *Batissa* from the Oligocene, **Hayashi, Y.;** Cretaceous pelecypods from the Izumi group and Awaji Island, **Ichikawa & Maeda;** New Tertiary locality of the *Vicarya* fauna in Aomori Prefecture, **Iwai, T.;** *Laternula* artificial fertilization in the River Yoshino, Tokushima City, **Kagawa, Y.;** *Vicarya* and *Vicaryella* in the Tertiary of Honshu, **Kamada, Y.;** Tertiary molluscs from Chichibu basin Saitama Prefecture, **Kanno, S.;** Miocene Mollusca from Hokkaido, **Kanno & Matsuno;** Miocene nautiloids from Shimane and Toyama prefectures, **Kobayashi, T. (4);** Triassic *Daonella*, **Kobayashi & Tokuyama, (1);** Cenozoic Turritellidae **Kotaka T. (1);** Mid-Scythian ammonites from Iwai formation, Nishitama-gun, Tokyo-to, **Kummel & Sakagami;** Tertiary and Quaternary gastropods from Okinawa, **MacNeil, F. S.;** Revision of Yokoyama's Tertiary fossils, **Makiyama, J.;** Miocene Pectinidae from the environs of Sendai, **Masuda, K. (1) & (3);** Cretaceous fauna and zonation, **Matsumoto, T. (1);** Cretaceous *Graysonites* from Kyushu, **Matsumoto, T. (2);** New locality of *Lima* (*Acesta*) *amaxensis* in Kagoshima Prefecture. **Monden, S.;** Variation of *Rapana* in the Pleistocene of Bosô Peninsula, **Nagasawa, J. (3);** Faunal significance of Cretaceous Trigoniids, **Nakano, M.;** Permian nautiloids, **Nakazawa, K. (1);** Permian and Eo-triassic Myophoriidae, **Nakazawa, K. (2);** Pleistocene molluscs, S. Kantô, **Ogose, S. (1);** Plio-Pleistocene and Pleistocene correlations between Japanese and European Mollusca, **Ogose, S. (2);** Tertiary Mollusca from the Abukuma Mountainland, **Omori, M.;** Triassic Mollusca from Kitakami Massif, N. E. Japan, **Onuki & Bandô (1);** Triassic ammonites from the Kitakami Massif, **Onuki & Bandô (2);** Upper Mesozoic molluscs of the Kwanmon group, **Ota, Y. (1);** Non marine gastropods from the Upper Mesozoic Kwanmon group, **Ota, Y. (2);** Palaeogene molluscs, **Oyama, Mizuno & Sakamoto;** Pliocene pectinids and venerids, **Shuto, T. (1);** Miocene Cardiids from the Miyazaki Group, **Shuto, T. (2);** Pelecypoda from the Upper Jurassic Soma Group, **Tamura, M. (1);** Mitilids, Myacids and *Neoburmesia* from the Jurassic Soma Group, **Tamura, M. (2);** Upper Jurassic Pteriacea from Fukushima Prefecture, **Tamura, M. (3);** Late Triassic pelecypods from Nagato Province, West Japan, **Tokuyama, A. (1);** Pelecypod fauna of the late Triassic in West Japan, **Tokuyama, A. (2);** Late Triassic pelecypods from West Japan, **Tokuyama, A. (3).**

AUSTRALIAN AND POLYNESIAN REGION

Australia.—Jurassic and Cretaceous molluscs from the Dampier Peninsula, **Brunnschweiler, R. O.;** Recent and Tertiary Australian Potamididae, **Cotton, B. C. (16);** "*Pettancylus*" *australicus* from the Torrens River,

S. Australia, **Hubendick, B. (1)**; Comparison of Pleistocene and recent molluscs in the Swan River district, W. Australia, **Kendrick, G. W.**; Triassic molluscs from the Springfield basin, **Ludbrook, N. H. (1)**; New Pliocene *Tylospira* from Tasmania, **Marwick, J. (2)**; Carboniferous ammonoids from the N.W. **Glenister, B. F.**; A Clymeniid from the *Wocklumeria* zone of New South Wales, **Pickett, J. W.**; Silurian New South Wales lamellibranchs, **Sherrard, K.**

New Zealand.—Fossil history of Calyptraeidae, **Boshier, D. P.**; A new Triassic *Kalentera* from Awakino, **Grant-Mackie, J. A.**; Triassic ammonoids, **Kummel, B. (1)**; Tertiary Mollusca from Otais Gorge South Canterbury, **Marwick, J. (1)**; Jurassic Mollusca described as Triassic by Wilckens from Mt. St. Mary, **Speden, I. G.**; Triassic pelecypods, **Waterhouse, J. B. (1)**; *Mellarium* a new Triassic gastropod from the Southland syncline, **Waterhouse, J. B. (2).**

Pacific Islands.—*Acochlidium amboinense* discovered in the Palau islands, **Bayer & Fehlmann**; *Meliobba* from the Schrader Range, New Guinea, **Clench & Turner, (2)**; Cretaceous lamellibranchs from New Caledonia, **Freneix, S. (1)**; Distribution of molluscs during the Cenozoic, **Ladd, H. S. (2)**; Non-marine Mollusca from the Solomon Islands, **Solem, A. (1).**

ETHIOPIAN REGION

Yemen.—Fossil pelecypods and gastropods from the Yemen, **Poel, L. Van de.**

Africa, Eastern.—Jurrassic lamellibranchs and gastropods from Harar, E. Africa, **Jaboli, D.**; A new *Pisidium* from Kenya, **Kuiper, J. G. J. (1)**; New species of *Bukobia* from Kenya, **Urban, S.**; Jurassic Cephalopoda from Harar, E. Africa, **Venzo, S. (1)**; East African slugs of the family Urocyclidae, **Verdcourt, B. (1)**; A new species of *Tayloria* from Tanganyika, **Verdcourt, B. (4)**; On generic relationships of certain Helicarionidae of East Africa, **Verdcourt, B. (6)**; Records of Veronicellidae from East Africa, **Verdcourt, B. (7)**; *Agriolimax laevis andicolus* (Orb.) in Nairobi, **Verdcourt, B. (8)**; Fluctuations in snail populations in northern Tanganyika, **Webbe, G.**

Africa, Western.—Upper Cretaceous ammonites from N.E. Nigeria, **Barber, W.**; Paleocene Mollusca of Senegal, **Chabaglian, J.**; Ontogeny of the hinge line in Lutetian (Eocene) lamellibranchs, from Senegal, **Freneix, S. (2)**; Ecology and mode of life of *Limicolaria* from West Africa, **Frömming, E. (1)**; Systematic study of molluscs from Angola, **Paes da Franca, M. de L. (2)**; Miocene Mollusca from Moçâmedes and Cabo Negro-Rocha de Magalhães (Porto Alexandre), Angola, **Silva, G. H. da.**

Africa, Central.—Mesozoic Mollusca from the Lualaba beds, Congo, **Cox, L. R. (8)**; *Biomphalaria* in Lake Kivu, Congo, **Gillet, Brauaux and Wolfs**; *Biomphalaria a. pfeifferi* breeding in Stanleyville, Congo, **Lassance, M.**; Bilharzia control south of Lake Kivu, Ruanda coast, Congo, **Meyus, Clerx & Evens**; Further collection of *Tomichia hendrickzi* from the Congo, **Verdcourt, B. (5).**

Africa Southern.—Key to genera of S. African freshwater and estuarine Gastropoda, **Eeden, J. A. van**; Bilharziasis and its snail vectors in Mozambique, **Morais, T. de,**; Molluscs from Inhaca Island, Mozambique, **Paes da Franca, M. de L. (1)**; A new *Trigonia* from the Neocomian Cretaceous of Amsterdam Hoek, Cape Province, **Pringle, J. A.**

Atlantic Isles.—Terrestrial gastropods of the Island of Annobón, Gulf of Guinea, **Zárate & Alvarez.**

Madagascar.—*Schistosoma mansoni* parasitism study, **Brygoo & Capron**; Snail hosts of *Schistosoma* in the region of Ambositra, **Capron & Brygoo**; Cercarial infestation of *Bulinus*, **Capron & Lartigue**; Atlas of fossils characteristic of Madagscar from the Lias to Lower Cretaceous, **Collignon, M.**

NEARCTIC REGION

North America.—Cambrian and Ordovician loricates, **Bergenhayn, J. R. M.**; Marine Carboniferous, **Elias, M. K.**; Carboniferous cephalopods from Arkansas, Kentucky, Indiana, Oklahoma, Texas and Utah, **Gordon, M.**; Early Cretaceous ammonites from the Pacific Coast States, U.S.A., **Imlay, R. W. (2)**; *Pterotrigonia* from the Cretaceous of the west coast, **Jones, D. L. (1)**; Gulf Coast Cretaceous ammonite types, **Matsumoto, T. (3)**; The Mowry Shale (Cretaceous) of Canada and the U.S.A., **Reeside & Cobban**; Cretaceous oysters, **Stenzel, H. B.**;

Alaska and Canadian Subregion.—Mollusca from Manitoba, **Beetle, D. E. (1)**; Silurian Mollusca from Devon Island, Canadian Arctic Archipelago, **Boucot, Martinsson, Thorsteinsson et al**; Mollusca from Afognak and Sitkalidak Islands, Kodiak Group, Alaska, **Eyerdam, W. J. (2)**; Jurassic ammonites in the Canadian Arctic from Ellesmere Island to the Aklavik mainland region, **Frebold, H.**; Jurassic Mollusca of Alberta and British Columbia, **Frebold, Mountjoy & Reed**; Cretaceous Mollusca from W. Peace River Plains Alberta, **Gleddie, J.**; Mollusca from the Permian of Grinnell Peninsula, Devon Island, Canada, **Harker & Thorsteinsson**; Late Pliocene marine fauna from Kivalina, Alaska, **Hopkins & MacNeil**; Albian ammonites from the Chitina Valley and Talkeetna mountains, Alaska, **Imlay, R. W. (1)**; Upper Cretaceous pelecypods from the Colville River, N. Alaska, **Jones & Gryc**; Bearpaw shale from the Lethbridge area Alberta, **Link & Childerhose**; A new pelecypod from the Permo-Carboniferous of the Banff area, Alberta, **McGugan, A.**; Ammonoid faunas of the Upper Triassic Pardonet formation, Peace River Foothills, British Columbia, **McLearn, F. H. (1)**; Macroscopic bottom fauna of Lac la Rouge, Faskatchewan, **Oliver, D. R.**; Mississippian ammonoids from Peel River Yukon Territory and Liard River, British Columbia, **Sellers & Furnish**; The bottom fauna of Lake Huron, **Teter, H. E.**; Marine Pleistocene faunas of Vancouver Island, **Wagner, F. J. E.**; Cretaceous invertebrates from the plains of Southern Alberta, **Warren, P. S.**; A new Cretaceous ammonite from Hume River, N.W. Territories, **Warren & Stelck**; Carboniferous gastropods from Northern Alaska, **Yochelson & Dutro.**

North-East United States.—Fossils of the Lower Devonian of New Hampshire, **Boucot & Arndt**; Wisconsin molluscan fauna from the Quaternary at Jefferson County Kentucky, **Browne & McDonald**; *Cepaea nemoralis* (L.) in Rhode Island, **Clench, W. J. (4)**; Two new succineids from Maryland, **Grimm, F. W.**; A new *Succinea* from Cape May, New Jersey, **Hubricht, L. (5)**; *Trichia hispida* from a gravel quarry 1·4 miles S. of Sharon, Schoharie Co., New York, hirsute shells, **Hubricht, L. (7)**; Occurrence of *Vallonia perspectiva* in Maryland, **Jackson, R. W.**; Northern Connecticut freshwater gastropods, **Knight, C. B.**; Studies on Mollusca in six Pleistocene lakes in Ohio, **La Rocque, A. (2)**; *Aequipecten* from the Niantic River, Connecticut, **Marshall, N.**; New Miocene Mollusca from Maryland and Virginia, **Oleksyshyn, J.**; Ecological study of benthic organisms in three Illinois River Flood Plain Lakes,

Paloumpis & Starrett; Freshwater mussels from The Angel Site, Vanderburgh Co. Indiana, **Parmalee, P. W.;** Upper Devonian Naples group in New York State, **Sutton, R. G.;** A Pleistocene marine mollusc from near Ithaca City, New York State, **Wells, J. W.;** Marine and freshwater Carboniferous from Western Pennsylvania, **Williams, E. G.;** Pleistocene molluscan faunas of the Newell Lake deposit, Logan County, Ohio, **Zimmerman, J. A.;**

South-East United States.—*Rhodacmea cahawbensis* in Alabama, anatomy, **Basch, P. F.;** *Zachrysia provisoria* in Homestead, Florida, **Clench, W. J. (3);** Mississippi occurrence of *Hendersonia occulta* (Say) fossil, **Hubricht, L. (2);** Occurrences of *Bradybaena similaris* (Fer.) in Mississippi and Alabama, **Hubricht, L. (3);** *Pomatiopsis lapidaria* from Carolina, **Hubricht, L. (6);** New subspecies of *Crassatella* from the Middle Eocene of Mississippi, **Kent, L. S.;** A new *Gisortia* from the Eocene of Florida, **Palmer, K. V. W. (2);** Molluscan remains from the Etowah Site, Georgia, **Schalie, H. v. d. (2);** Cretaceous Gastropoda, Tennessee & Mississippi, **Sohl, N. F.;** Land snails from Central South Florida, **Wilson, D.;** Colour patterns of Florida tree snails, **Young, F. N.**

Central North United States.—Wyoming Mollusca, **Beetle, D. E. (3);** New records for Albany Co., Wyoming, **Beetle, D. E. (4);** Ecological survey of the gastropods of Lake West Okoboji, Iowa, **Bovbjerg & Ulmer;** Ecological reconnaissance of the bottom fauna, Miller's Bay, Lake Okoboji, Iowa, **Clampitt, Waffle & Bovbjerg;** Pleistocene molluscs from Nebraska, discribution of *Planorbula*, **Frankel, L.;** Pleistocene Mollusca of S.E. South Dakota, **Hamill, R.;** Fauna from the Tensleep sandstone in the Wind River Basin and Big Horn Basin of Wyoming, **Hoare & Burgess;** Upper Cambrian fauna from the Northwest Wind river mountains, Wyoming, **Lochman & Hu.**

Central South United States.—Additional Silurian fossils from the Hunton Group, Oklahoma, **Amsden, T. W.;** Mississippian Mollusca of West-Central, New Mexico, **Armstrong, A. K.;** *Pupoides inornatus* in Colorado, **Beetle, D. E. (2);** *Gyraulus arizonensis* in Texas, **Branson, B. A.;** An unusual spine bearing Paleozoic gastropod from Oklahoma, **Branson, C. C. (2);** Marine clam in Carboniferous freshwater sediments in Oklahoma, **B[ranson], C. C. (3);** Classification of Oklahoma clams, **Branson, C. C. (4);** A little known Oklahoma fossil refigured, **Branson, C. C. (5);** *Conocardium* in the Silurian of Oklahoma, **Branson & Amsden;** *Parapuzosia* from the Cretaceous of Ellis, Dallas and Collin Counties, N. Texas, **Clarke, D .L.;** A rare Paleozoic chiton from Ada, Oklahoma, **Frederickson, E. A.;** Pleistocene fauna from S.W. Kansas, **Hibbard & Taylor;** Land shells in beach drift in Texas, **Hubricht, L. (1);** *Bulimulus* spp.in southern Texas, **Hubricht, L. (4);** Ordovician sauna from N.E. Oklahoma, **Huffman & Starke;** Paleoecological study of the Lower Cretaceous at Tarrant, Denton and Cooke Counties, Texas, **Laughbaum, L. R.;** A new *Calipyrgula* and notes on *Cochlicopa riograndensis* from the Pleistocene of Texas, **Leonard & Ho. (1);** A new Pleistocene *Calipyrgula* from Texas, **Leonard & Ho (2);** Taxonomic and anatomical study of Succineidae in Kansas, **Miles, C. D.;** Cretaceous Mollusca of Purgatory Creek area, Hayes and Comal Co., Texas, **Noyes & Young;** Land snails from the " Williams Site " Central Texas, **Suhm, D. A.;** Pliocene and Pleistocene formations of S.W. Kansas and W. Oklahoma, **Taylor, D. W. (2);** Middle Paleozoic history of central and west Texas, **Wilson & Majewske;** Techniques of molluscan zonation in Texas Cretaceous, **Young, K..**

North-West United States.—Lower Cretaceous fossils from S.W. Oregon and their palaeogeographical significance, **Jones, D. L. (2).**

South-West United States.—Cretaceous fossils in Northern Sacramento Valley, California, **Brown & Rich;** Pliocene and Pleistocene Mollusca, San Francisco peninsula, **Glen, W. (1);** Pliocene freshwater gastropods from San Mateo County, California, **Glen, W. (2);** Displaced Miocene molluscan provinces along the San Andreas fault, California, **Hall, C. A.;** Mollusca of the Flagstaff formation Central Utah, **La Rocque, A. (1);** Upper Cretaceous ammonites of California, **Matsumoto, T. (4);** A new *Pallifera* from Pima Co., Arizona, **Miles & Mead;** Mollusca from the Cretaceous rocks of Sacramento Valley, California, **Murphy & Rodda;** Mollusca of the Montane and Arctic-Alpine zones in Utah, **Roscoe, E. J. (1);** A new land snail from a cave in Trinity County California, **Smith, A. G. (5);** Cretaceous oysters, South Western North America, **Stenzel, H. B.;** Pleistocene mollusca from Torrey Pines Park, California, **Valentine, J. W. (2);** Isotopic and zoogeographic palaeotemperatures of Californian Pleistocene Mollusca, **Valentine & Meade;** Pliocene molluscs from the S.E. Los Angeles basin, previously unreported, **Vedder, J. G.;** Permian Gastropoda of the S.W. United States, **Yochelson, E. L. (2).**

CENTRAL AMERICAN REGION

Central America.—Vertiginidae from the Bahamas. Lesser Antilles, and S. American mainland. **Haas, F.**

British Honduras.—Non-marine molluscs, **Haas & Solem.**

Mexico.—Cercariae-bearing snails collected from Paztcuaro, Michoacán, **Caballero, y. C., Garcia-Torres & Flores-Barroeta;** Non marine molluscs from La Playa, N. Sonora, **Drake, R. J. (3);** Geologic history of Baja California and its marine faunas, **Durham & Allison;** Shell middens of San José Island, W. Mexico, **Emerson, W. K. (1);** Pleistocene molluscs from near Punta San José, Bay of California, **Emerson, W. K. (2);** Pleistocene invertebrates from Caralvo Island, Baja California. **Emerson, W. K. (3);** Pliocene and Pleistocene molluscs from Rosalia Point, California Bay, **Emerson & Hentlein;** Carboniferous goniatites from Caballeros Canyon, State of Tamaulipas, **Murray, Furnish & Carrillo;** Miocene Mollusca from Cuenca Salina, Isthmus of Tehuantepec, **Perrilliat Montoya, M. C.;** Pleistocene Mollusca from Bahia San Quintin, **Valentine, J. W. (1).**

West Indies.—Ecological notes, Puerto Rico, **Golley, F. B.;** Land shells of Navassa Island near Haiti, **Turner, R. D. (2).**

SOUTH AMERICAN REGION

Colombia.—Devonian-Pleistocene molluscs, **Bürgl, H.;** Lower Cretaceous ammonites, **Haas, O.**

Venezuela.—Notes on non-marine Mollusca, **Solem, A. (2).**

Dutch Guiana.—On a small collection of shells from Surinam collected by Dr. J. van der Drift, **Altena, C. O. v. R. (3).**

Peru.—A new *Newboldius* figs, **Weyrauch, W. K. (1);** Land snails, **Weyrauch, W. K. (2);** Twenty new species of Land snails, figs., **Weyrauch, W. K. (3).**

Brazil.—Morphobiological studies of vector molluscs of *Schistosoma mansoni* in the City of Salvador Bahia, **Barretto, A. C.;** Marine fauna of the Pirabas formation,

Miocene of Para State, **Ferreira, C. S.**; Miocene Pelecypoda from Pará State, **Ferreira & Cunha**; New Permian Pelecypoda, S. Paulo, **Mendes, J. C.**; Miocene cephalopod from Pará State, **Oliveira, P. E. de**; Pomacea of the Amazon river system, **Pain, T.** (2).

Argentina.—Paleocene pelecypods from the river Ewan, Tierra del Fuego, **Camacho, H. H.**; Tertiary molluscan fauna from Arroyo Verde, Atlantic Coasts of Patagonia, **García, E. R. de**; A new *Lyrodes* from Entre Rios, **Parodiz, J. J.** (1); New *Littoridina*, La Rioja, **Parodiz, J. J.** (2); Cambrian Mollusca from Cerrillo El Solitario, Mendoza, **Poulsen, C.**; New *Acrorbis*, Misiones, **Scott, M. I. H.** (1); Terrestrial gastropods, **Scott, M. I. H.** (2); Cretaceous ammonites from Patagonia, **Wetzel, W.**

Chile.—Land Mollusca, **Biese, W. A.**

ANTARCTIC REGION

Catalogue of Antarctic and Subantarctic Mollusca **Powell, A. W. B.**

(b) MARINE

ARCTIC

Arctic Seas.—Mollusca from drifting station Alpha north of Point Barrow, Alaska, **Clarke, A. H.** (3); Marine infaunal benthos in Arctic N. America, **Ellis, D. V.**; White Sea littoral and sublittoral benthos, **Mileikovsky, S. A.**; Quantitative distribution of benthos in the E. Bering Sea, **Neuman, A. A.**

NORTH TEMPERATE

Eastern North Atlantic.—Distribution of *Aeolidia papillosa*, **Almaça, C.**; *Crepidula* from Kenmare River, Co. Kerry, Ireland, **Arnold, D. C.**; Littoral animals of St. Kilda, **Bagenal, T. B.**; N.E. Atlantic records of sighting squids, **Baker, A. de C.**; *Lithophyllum* faunal associations around Roscoff, Finistere, **Bénard, F.**; Ecology of Areiño beach, Ria de Vigo, Spain, **Figueras, A.** (3); New littoral habitats of molluscs in Southern Portugal, **Fischer-Piette, E.** (2); *Littorina saxatilis* in the Ria de Vigo, N.W. Spain, and the Odet and Rance estuaries, France, **Fischer-Piette & Gaillard**; Seasonal variation in the chemical content of mussels in Vigo Bay, **Fraga, F.** (4); Ecology of oysters at Morbihan N.W. France, **Marteil, L.**; Habits of *Cyclope neritea* from Socoa, French Basque Coast, **Morton, J. E.** (2); Cephalopods collected off Bermuda, **Voss, G. L.** (1).

West Atlantic.—*Calliostoma* of the Western Atlantic, **Clench & Turner** (1).

Western North Atlantic.—Population mortalities of *Brachidontes* in upper Chesapeake Bay, **Allen, J. F.**; Attracting fish by oyster shell plantings in Chincoteague Bay, Maryland, **Arve, J.**; Minas Channel and Basin, and Cobequid Bay, Bay of Fundy fauna, **Bousfield & Leim**; Plankton in the Passamaquoddy area of New Brunswick and Maine, **Logaré & Maclellan**; Intertidal zonation of *Mya arenaria* near Quincey, Mass, **Matthiessen, G. C.** (2); Paralytic shell fish poisoning in the Bay of Fundy area, **Medcof, J. C.**; Hermaphrodite *Placopecten* from Georges Bank (68° 45′ W. 43° 03′ N.), **Merrill & Burch**; Results of *Mya arenaria* bottom survey in Somerset Co., Maryland **Pfitzenmeyer, H. T.** (1); Notes on *Elysia chlorotica* from Chesapeake Bay, Maryland, **Pfitzenmeyer, H. T.** (2); Spawning of *Placopecten* on Georges Bank (41° 15′ N, 66° 22′ W.), **Posgay & Norman**; Animal-sediment relationships, Buzzards Bay, Massachusetts, **Sanders, H. L.** (1); Benthic fauna, Buzzards Bay, Massachusetts, **Sanders, H. L.** (2); Range extension of *Thais haemastoma floridana* into Chincoteague Bay, **Sieling, F. W.**; Endoparasitic gastropods of Puget Sound holothurians, **Tikasingh, E. S.**; Subtidal populations of oysters in the region of Cape Hatteras N. Carolina, **Wells & Gray** (1); *Mytilus edulis* transport around Cape Hatteras and occurrence on the Carolina coast, **Wells & Gray** (2).

Gulf of Mexico and the Caribbean.—Alacran Reef north of the Yucatan peninsula, Gulf of Mexico, **Kornicker, Bonet et al**; Fauna of rocky shores of Barbados, W. Indies, **Lewis, J. B.**; Opisthobranchs from the N.W. Gulf of Mexico, **Marcus, Ev. & Er.** (4); Caribbean species of *Truncatella*, **Torre, A. de la**; Puerto Rico—notes on seven species of *Conus*, **Warmke, G. L.**

North Sea.—Zuider Zee gastropods, **Butot, L. J. M.** (4); Hydrobiology of Friesland, **Hartog & Tulp**; Ecological survey of the Dollart-Ems estuary, **Heide, S. v. der**; Larvae and spatfall of oysters in the Oosterschelde Netherlands, 1958, **Korringa, P.**; Distribution of *Mytilicola intestinalis* along the Belgian coast, **Leloup, E.** (2); Marine shells of Terschelling, **Tanis & De Vries.**

Black Sea.—*Mytilus galloprovincialis* on the Black Sea coasts of Roumania, **Bacalbaşa-Dobrovici, N.**; Physico-chemical and biological studies of the Black Sea, **Băcescu & Serpoianu et al**; *Limapontia capitata* and *Stiliger bellulus* in the Black Sea, **Chukhchin, V. D.** (1); Pelagic gastropod larvae in the Black Sea, **Chukhchin, V. D.** (2); *Rapana bezoar* discovered on the Turkish coast of the Black Sea, **Fischer-Piette, E.** (1); Mollusca from the Azov Sea, Black Sea, Sea of Marmara and the Aegan Sea, **Grossu & Cărăuşu**; Zoobenthos in the Bay of Varna, **Kaneva-Abadjieva, V.** (1); Mollusca of the Bulgarian shores of the Black Sea, **Kaneva-Abadjieva, V.** (2); Bottom fauna of the Molochnaya estuary and the Pre-Azov area of the Ukraine, **Lubyanov, I. P.**; Quantitative distribution of mussels in the eastern Crimean coast between C. Takil and C. Meganom, **Nikitin, V. N.**; A study of salinity tolerance of *Mytilus galloprovincialis* from the Black Sea, **Pora, Ruşdea & Stoicovici.**

Baltic Sea.—Euryhaline snails in the Baltic, **Bielawski, J.**; Molluscan fauna of the Bay of Pärnu, **Järvekülg, A.**; Amphineura, Scaphopoda and Cephalopoda of Denmark, **Muus, B. J.**; The bottom fauna of Airisto Sound S. W. Finland, **Tulkki, P.**

Mediterranean Sea.—*Carinaria mediterranea* from Torremolinos, **Alvarado, R.**; Effect of light on growth of mussels in the Mediterranean Sea, **Andreu, B.**; Peculiar geographical conditions and plankton cycles in Mar Grande and Mar Piccolo of Taranto, **Angelis & Valle**; Plankton samples using different nets in the Gulf of Cagliari, **Anichini, C.** (2); Plankton from the Adriatic Sea, **Battaglia, Mozzi & Varagnolo**; Characteristics of fauna and habitat at San Giovanni à Teduccio in the Bay of Naples, **Cognetti & Santarelli**; Cultivation of shell fish in Italy, **Coppini, R.** (2); 600 metres down off Castiglione, Algeria, **Dieuzeide, R.**; Zooplankton of the Gulf of Lyon and the east coast of Corsica, **Furnestin, M.-L.**; *Mytilus* from salt marshes at Ganzirri, Messina, **Genovese, S.**; Two new opisthobianchs from Villefranche-sur-Mer, France, **Haefelfinger, H.-R.** (1); *Polycera quadrilineata* from the Bay of Villefranche-sur-Mer, France, **Haefelfinger, H.-R.** (3); Mollusca from Banyuls-sur-Mer, S. France, **Kernéis, A.**; Faunal modifications in the Etang de Berre, Bouches-du-Rhône, France, **Marx, P.** (1); Quaternary submarine beds investigated by divers off the coast of France, **Marx & Picard**; *Conus* from Banyuls-sur-Mer, **Martoja, M.**; Cephalopoda from Catalonian waters based on the collection at Blanes Laboratory, Spain, **Morales, E.** (1); First record of

Opisthoteuthis agassizii from the Mediterranean at Blanes, **Morales, E.** (2); *Eledone* in the Gulf of Naples, **Morales, E.** (4); *Eledone cirrosa* in the eastern Mediterranean, **Morales & Bas** (2); First report of *Patella coerula* in the Sea of Pescara, **Pepe, G.**; A new Eolid from Banyuls-sur-Mer, **Portmann & Sandmeier,** (2); Mollusca from the Balearic Islands, **Sánchez, J. A.**; Mollusca from the fishery grounds near Alexandria, **Steuer, A.**; Marine molluscan assemblages of the Rhone delta, **Straaten, L. M. J. U. van.**

North Pacific.—North Pacific pulmonate limpets, **Yonge, C. M.** (3).

Eastern North Pacific.—*Strombus maculatus* and allied species in Hawaii, **Anon,** (17); *Mopalia hindsi recurvans* subsp. nov. from San Francisco Bay, **Barnawell, E. B.**; A new tectibranch from the southern California coast, **Beeman, R. D.**; Introduction of aquatic animals into Hawaiian waters, **Brock, V. E.**; Hawaii, a provisional check list of molluscs, **Bryan, jr., E. H.**; Abalones of Baja California, **Buen, F. de**; *Cypraea semiplota* becoming rare in Hawaii, **Burgess, C. M.** (2); Shells dredged off Keehi, Hawaii, **Burgess, C. M.** (3); Benthic molluscs of deep basins off S. California, **Hartman & Barnard** (1); Benthic fauna of deep basins off S. California, **Hartman & Barnard** (2); Clipperton Island gastropods, **Hertlein & Allison**; A new *Trivia* from south of Punta Final, Baja California, **Howard & Sphon, jr.**; *Tamanovalva* from Espiritu Santo Island, Gulf of California, **Keen, A. M.** (5); Biomass of molluscs of the continental shelf area of S. California, **Pearson, Pomeroy & McKee** (1); Deep water collecting off Guaymas, Mexico, **Shasky, D. R.**; On some little known species of the west coast of North America, **Steinberg, J. E.**; Fluctuations in a molluscan population after a red tide, Lower California, **Stohler, R.** (1); *Olivella biplicata* population study in California, **Stohler, R.** (2); Effect of pulp and paper mill wastes in waters off the coast of British Columbia, **Waldichuk, M.**; *Strombus taurus* Rongelap District, Hawaii, **Willis, R. C.**; *Lepeta concentrica* habitat in Griffin Bay, San Juan Island, **Yonge, C. M.** (1).

Western North Pacific.—A collection of molluscs from Cape D'Aquilar, Hong Kong Island, **Adal, M. N.**; *Okenia, Goniodoridella* and *Gonodoris* from Japan, **Baba, K.** (2); Two new *Eubranchus* spp., from Japan, **Baba, K.** (3); A new *Herviella* from Sagami Bay, Amakusa, **Baba, K.** (4); Japanese genera *Polycera, Palio, Greilada* and *Thecacera*, **Baba, K.** (5); *Crassostrea* culture in Hong Kong, **Bromhall, J. D.**; *Petalifera habei* a new species from Amakusa Bay, **Eales, N. B.** (1); Distribution of bivalves in the North Western Pacific, **Filatova, Z. A.**; Japanese shells described by A. A. Gould, **Habe, T.** (1); Eleven new bivalves from Tanabe Bay, Wakayama Pref., Japan, **Habe, T.** (3); New Mollusca from Reihoku-Cho, Amakusa, Kumamoto Pref. Japan, **Habe, T.** (4); Pelecypod shell remains in Tanabe Bay, Wakayama Prefecture, Japan, **Habe, T.** (5); Japanese opisthobranch veligers from near Seto Marine Laboratory, **Hamatani, I.** (1); Veligers of Japanese opisthobranchs, **Hamatani, I.** (2); A new *Fulgoraria* from Japanese waters, figs., **Hayashi, S.**; Artificial denudation on the coast of Matsushima Bay, Japan, **Hoshiai, T.**; Marine borers along the coast of Kagoshima Prefecture, Japan, **Mawatari & Kitamura**; Dysodonta of the Far Eastern seas of the U.S.S.R., mainly the Okhotsk Sea, **Skarlato, O. A.**; New species of Chinese Pholadidae, **Thang, Tsi & Li.**

TROPICAL AND SUBTROPICAL

East Atlantic.—*Stephopoma mamillatum* n. sp., off Gorée, Senegal in 27 fms., **Morton & Keen.**

Western South Atlantic.—Mytilidae from Argentina, synonymy, characters and distribution of species, **Ageitos de Castellanos, Z. J.** (1); A new squid from Lat. 41° off Argentina, **Ageitos de Castellanos, Z. J.** (2); Ecology, anatomy and reproduction of *Ostrea* in Argentina, **Ageitos de Castellanos & Cabrera**; A giant ultra-abyssal *Cocculina* from the Argentine basin, **Clarke, A. H.** (1); Contributions to the study of Brazilian marine molluscs, **Oliveira, M. P. de**; A new Nudibranch genus from Mar del Plata, **Risso-Dominguez, C. J.**; Polyclad worms in mantle cavities of gastropods from Ubatuba, **Smith, E. H.**

South Atlantic.—The Benguela current, **Hart & Currie**; Pelecypods from Tristan da Cunha, **Soot-Ryen, T.**

East Pacific.—Presence of *Conus* sp. nov., **Burch, J. Q.** (3); Remarks on Muricid gastropods, **Emerson, W. K.** (4); Eastern Pacific Drupinae, **Hertlein, L. G.** (1); Range extensions for Panamic Province Mollusca, **Keen, A. M.** (1); A new *Phyllonotus* from Costa Rica, figs., **Keen, A. M.** (2).

Red Sea.—Cephalopoda from the Gulf of Aqaba, **Adam, W.** (4); Amphineura from the Sinai Peninsula and Gulf of Aqaba, **Leloup, E.** (1).

Persian Gulf.—Mollusca of Ras Tanura Persian Gulf, **Biggs & Grantier.**

Indian Ocean.—The genus *Strombus* in the Indo-Pacific, **Abbott, R. T.** (5); Cephalopoda mainly caught off the E. Coast of Africa, **Adam, W.** (3); *Chlamys* from the East Coast of Africa, **Adam, W.** (6); *Cypraea leucodon* from the Indian Ocean, **Clench, W. J.** (1); *Pinctada* variation in Shark Bay Western Australia, **Hynd, J. S.**; Shore molluscs of N. Mozambique, **Kalk, M.**; Ecological notes on *Conus* from Trincomalee, Ceylon, **Kohn, A. J.** (2); Marine Turritellidae from East Africa, **Marche-Marchad, I.**; Shipworms from Visakhapatnam harbour, India, **Nagabhushanam, R.** (2); Shipworm settlement studies in Visakhapatnam harbour, India, **Nagabhushanam, R.** (3); Molluscan shells washed up on the sandy beach at Suratkal, South Kanara, **Patil & Gopalkrishna**; List of cowries, arranged alphabetically, from Mauritius, **Schilder, F. A.** (3); Ecology of a salt water lagoon near Mandapam, **Tampi, P. R. S.**; Western Australian volutes, **Weaver, C. S.** (2).

SOUTH TEMPERATE AND SUB-ANTARCTIC

Eastern South Pacific.—Grimwood's Island (Tuamoto Archipelago) and Hugh Cuming, text map., **Dance, S. P.** (3); A new gastropod from Easter Island, **Hertlein, L. G.** (2); Glycimeridae from Chilean waters, **Stuardo, J.**

Western South Pacific.—New *Murex*, Philippine Islands, **Burch, J. Q. & R. L.** (1); *Edenttellina* from Torquay, Victoria, Australia, **Burn, R.** (1); Bivalved gastropods from New South Wales, **Burn, R.** (2); A rare opisthobranch from S.E. Australia, **Burn, R.** (3); Bivalved gastropods from Victoria, Australia, **Burn, R.** (5); A new subspecies of *Cypraea saulae* Gask. from the Tapul Group, **Cate, C. N.** (1); A new subsp. of *Cypraea cernica* Sow, **Cate, C. N.** (2); Rare shells dredged off St. Francis Island, South Australia, **Cotton, B. C.** (1); Recent alterations in range and abundance of marine molluscs in South Australia, **Cotton, B. C.** (2); A large *Nototodarus* from S. Australia, **Cotton, B. C.** (3); Haliotidae of Australia, **Cotton, B. C.** (4); Cerithiidae from Tropical Australia and the Indo Pacific, **Cotton, B. C.** (5); Review of Australian Strombidae, **Cotton, B. C.** (6); Cassididae, figs, taxonomy localities, **Cotton, B. C.** (7); Naticidae of Australian waters, **Cotton, B. C.** (8); Olividae of Austra-

lian waters, **Cotton, B. C. (9)**; Nassariidae of Australian waters, **Cotton, B. C. (10)**; Muricidae of Australian waters, **Cotton, B. C. (11)**; Scalidae of Australian waters, **Cotton, B. C. (12)**; Buccinidae of Australian waters, **Cotton, B. C. (13)**; Fasciolariidae of Australian waters, **Cotton, B. C. (14)**; Mitridae of Australian waters, **Cotton, B. C. (15)**; A new scallop from South Australia, **Cotton, B. C. (17)**; *Gyrina gigantea* (Lmk.) in New Zealand waters, **Dance & Dell**; Chatham Islands marine Mollusca, **Dell, R. K.**; A new volute in 125 fathoms off Moreton Island, Queensland, **Garrard, T. A.**; A new *Chlamys* from Bora Bora, Society Islands, **Grau, G.**; *Zoila thersites* from Yorke Peninsula, S. Australia, **Hall, R. A.**; Marine Shells of the Line Islands, **Jewell jr., H. G.**; Some opisthobranch molluscs from Queensland, **Kenny, R.**; Notes on some Australian Volutidae, **McMichael, D. F.**; Ship-fouling in New Zealand waters, **Skerman, T. M.**; Diatoms in pearl fishing grounds in the Arafura Sea, **Takano, H.**; *Zoila thersites* from Spencer's Gulf S. Australia, **Trenberth, W. P.**

South African Waters.—*Guivillea* rediscovered in S. African waters, **Barnard, K. H. (1)**; New S. African marine species and genera, **Barnard, K. H. (3)**; Mollusca from the Bay of Point-Noire, Congo, **Collignon, J. (1)**; Occurrence in South African waters of *Cypraea broderipi* Sow., **Dance, S. P. (1)**; New African species of *Dendropoma* **Keen & Morton**; Male *Pterotrachea* from a beach at Umtentweni, Natal, S. Africa, **Okutani & Habe.**

ANTARCTIC

Antarctic Seas.—Catalogue of Antarctic and Subantarctic Mollusca, **Powell, A. W. B.**

(B) Geological

Quaternary.—*Purpura* from Spain, **Bataller, J. R. (2)**; Eemian molluscs from a boring in Poland, **Brodniewicz, I. (1)**; Wisconsin molluscan fauna from Jefferson County, Kentucky, **Browne & McDonald**; Lists of Tirrenian Molluscs, Sardinia, **Dieni, I.**; N. African Scaphopoda, **Fantinet, D.**; Interglacial molluscs from Lobsing, Germany, **Heller, F. (2)**; Gastropods of Okinawa, **MacNeil, F. S.**; Mediterranean submarine beds investigated, **Marx & Picard**; *Dreissena polymorpha* Rybinsk region, U.S.S.R., **Novsky, V. A.**; Mollusca from the Middle Bug area, S. Russia, **Shovkoplyas, V. N.**

Pleistocene.—Fossiliferous xenoliths in the Móberg formation of S. Iceland, **Áskelsson, J.**; Comparison of recent and Pleistocene populations of *Pisidium* in Poland, **Brodniewicz, I. (2)**; Freshwater pelecypods from N. Anhwei, China, **Chow, M. M.**; Mollusca from Bay of California, Mexico, **Emerson, W. K. (2)**; Invertebrates from Ceralvo Island, Baja California, **Emerson, W. K. (3)**; Mollusca from Rosalia Point, California Bay, **Emerson & Hertlein**; *Planorbula vulcanata* geographic distribution in Nebraska, **Frankel, L.**; San Francisco peninsula Mollusca, **Glen, W. (1)**; Merxemian gastropods from Belgium and the Loire basin, **Glibert, M. (2)**; Mollusca of S.E. South Dakota, **Hamill, R.**; Large-sized oysters from Japan and their paleoecological implications, **Hayasaka, S.**; Marine fauna from Chita Peninsula, Japan, **Hayasaka & Iwai**; Fauna from S.W. Kansas, **Hibbard & Taylor**; Comparison of fossil and recent molluscs in the Swan River district, Western Australia **Kendrick, G. W.**; Fauna from tufa in Hertfordshire, **Kerney, M. P.**; Geological study of Alacran Reef, Campeche Bank, Mexico, **Kornicker, Bonet et al.**; Quantitative study of non-marine Mollusca in Ohio, **La Rocque, A. (2)**; Unusual preservation of interglacial Mollusca, **Lazar, E.**; A new *Calipyrgula* from Texas, figs., **Leonard & Ho (1)**; A new *Calipyrgula* from Texas figs.; **Leonard and Ho (2)**; Mollusca exposed by erosion in Central Slovakia at Muráň, **Ložek, V. (1)**; *Thais lapillus* from Sicily, **Malatesta, A. (1)**; Variation of *Rapana* in the Boso Peninsula, Japan, **Nagasawa, J. (3)**; Mollusca from Mandano Sand, S. Kantô, Japan, **Ogose, S. (1)**; Mollusca in a rocky coast faunule Bahia San Quintin, Mexico, **Valentine, J. W. (1)**; Mollusca from California habits and sources, **Valentine, J. W. (2)**; Isotopic and zoogeographic palaeotemperatures of Californian molluscs, **Valentine & Meade**; Marine faunas of S.W. British Columbia, **Wagner, F. J. E.**; A marine mollusc from New York State, **Wells, J. W.**; Interglacial deposits from Sussex, Hampshire and the Normandy coast, **West & Sparks**; Paleoecological study of the molluscan fauna in the marl and peat deposits of Newell Lake, Ohio, **Zimmerman, J. A.**.

Pliocene.—*Chlamys* from Pliocene and Miocene of Europe identified with *Chlamys* from recent Africa, **Adam, W. (6)**; A new *Patinopecten* from the Nojima formation, Kanagawa Pref. Japan, **Akiyama & Miyajima**; Mollusca from the Nakazato formation in Yokohama. **Aoki, N.**; Mollusca from Simlaul Silvaniei, Hungary, **Apostol, L.**; Mollusca of the Kosovo basin, **Atanacković, M.**; The Coralline Crag of Suffolk, **Baden-Powell, D. F. W.**, Mollusca of the Sannohe group, Japan, **Chinzei, K. (1)**; A new *Fortipecten* from the Sannohe group, N.E. Japan, **Chinzei, K. (2)**; Gastropods and pelecypods, Orosei, Sardinia, **Dieni & Omenetto**; New Cardiidae, Ukraine and Georgia, **Eberzin, A. G. (2)**; Mollusca from Rosalia Point, Mexico, **Emerson & Hertlein**; List of molluscs from Castrovillari (Cosenza), **Faillace, C.**; N. African Scaphopoda, **Fantinet, D.**; Molluscs from Llobregat, Barcelona, **Gillet, S. (1)**; Mollusca of the San Francisco peninsula, **Glen, W. (1)**; Freshwater gastropods from San Mateo county, California, **Glen, W. (2)**; Scaldisian gastropods from Belgium and the Loire basin, **Glibert, M. (2)**; Mollusca from the Pescadores Islands, Taiwan, **Hayasaka, I. & S.**; A marine fauna from Kivalina, Alaska, **Hopkins & MacNeil**; Fauna from Roquebrune, Alps, **Iaworsky & Curti**; Mio-Pliocene boundary and Pliocene Mollusca from Italy (Parma), **Petrucci, F.**; Mollusca from Castrocaro, Italy, **Ruggieri, G.**; Italian malacology, **Ruggieri, Bruno & Curti**; Malacofauna of Altavilla, **Ruggieri & Curti**; Pectinids and Venerids from the Miyazaki group, Japan, **Shuto, T. (1)**; New Cimmerien *Viviparus*, Georgia, Russia, **Taboyakova, V. Y.**; Previously unreported molluscs from Los Angeles basin, **Vedder, J. G.**

Cainozoic.—Distribution of Californian shallow water marine Mollusca, **Durham & Allison**; Japanese Turritellidae, **Kotaka, T. (1)**; Turritellid phylogeny, **Kotaka, T. (2)**; Molluscan faunas in the Pacific Islands, **Ladd, H. S. (2)**; Mollusca from the Japanese Erathem in which 1_1 and 1_2 correspond with Plio-Pleistocene and Lower Pleistocene, **Ogose, S. (2)**; Mollusca from the High Plains, **Taylor, D. W. (2)**; Freshwater gastropods from the Yemen, **Van de Poel, L.**

Tertiary.—Revision of German Naticacea, **Anderson, H.-J. (1)**; Pelecypoda from Tierra del Fuego, Palaeocene, **Camacho, H. H.**; Mollusca of west Senegal, W. Africa, Palaeocene, **Chabaglian, J.**; Molluscan fauna from the Atlantic coast of Patagonia, **Garcia, E. R. de**; New Gastropoda and Pelecypoda, Aral Sea, U.S.S.R., **Ilyina, A. P. (1)**; New locality of the *Vicarya* fauna in Aomori Prefecture, Japan, **Iwai, T.**; *Vicarya* and *Vicaryella* in the North east of Honshu, Japan, **Kamada, Y.**; Mollusca from the Chichibu basin, Central Japan, **Kanno, S.**; *Variamussium* subspp. nov. from Russia, Palaeogene, **Korobkov, I. A. (4)**; Deposits of the Amu-Darya in the

light of recent discoveries of molluscs (Palaeogene), **Korobkov & Makarova.** The Flagstaff formation of central Utah, Palaeocene, **La Rocque, A.** (1); Gastropods of Okinawa, **MacNeil, F. S.**; Montian *Nerinea* sp.nov. in the Crimea, **Makarenko, D. E.**; Revision of Yokoyama's "Fossils from Japan." **Makiyama, J.**; Molluscs from South Canterbury, New Zealand, **Marwick, J.** (1); *Carychium minimum* from Kirgiziya, Tien-shan, **Matekin, P. V.**; Some new Pectinidae from the Ukraine, **Merklin & Rozhe**; Pannonian Mollusca from S.E. of Belgrade, Yugoslavia, **Miletić-Spajić, O.**; Sahelian molluscs from S. Marino, **Moroni, M. A.** (2); Molluscs from the Abukuma Mountainland, Japan, **Omori, M.**; Handbook of Japanese Palaeogene molluscs, **Oyama, Mizuno & Sakamoto**; Stratigraphical study of Mollusca, **Papp in Lotze**; New nautiloids of the genus *Teichertia* from the U.S.S.R., **Shimansky, V. N.** (1).

Miocene.—Oyster beds from South eastern Ust Urt, U.S.S.R., **Aleksin & Merklin**; Prosobranchia from N.W. Germany, **Anderson, H.-J.** (2); Molluscs from Aomori Prefecture, Japan, **Aoki, S.**; General faunal assemblage from old river beds in Turkey, **Bačescu, M.**; Chokrak horizon Molluscs from Georgia, U.S.S.R., **Bagdasaryan, K. G.**; Tortonian Molluscs from North Hungary, **Bâldi, T.**; Pontian Molluscs from Spain, **Bataller, J. R.** (1); Of the country around Barcelona, Spain, **Bataller, J. R.** (4); *Liotia* from Ametlla de Ager, Spain, **Bataller, J. R.** (5); Gastropods from Catalan, **Bofill & Bataller**; *Amussium* from eastern Provence, **Catzigras, F.**; New *Spaniodontella* Georgia, U.S.S.R., **Chikovani, A. A.**; Molluscs from Cagliari, Italy, **Comaschi Caria, I.**; Pectinidae from Hungary and their biostratigraphic importance, **Csepreghy-Meznerics, I.** (2); Upper Burdigalian fauna from Winterberg, Czechoslovakia, **Čtyroký, P.**; A new gastropod from the Burdigalian of Schleswig-Holstein, **Dittmer, E.**; Pelecypods, Loire Basin, **Dollfus & Dautzenberg**; Mollusca found in the Pontian in S. Glina, Yugoslavia, **Eremija, M.**; N. African Scaphopoda, **Fantinet, D.**; Marine fauna of the Pirabas formation of Northern Brazil, **Ferreira, C. S.**; Pelecypoda from Brazil, **Ferreira & Cunha**; Tortonian fauna of Buituri, Roumania, **Gertrude, E.**; *Atlanta* sp. nov. from the Tortonian of the Ukraine, **Ghoretzkii & Burova**; Helvetian Mollusca from Ponsana, Italy, **Giannini & Tongiorgi**; Diestian gastropods from Belgium and the Loire basin, **Glibert, M.** (2); Molluscs in the Blue Clays of Višnjica, **Grubić, D.**; Displaced molluscan provinces along the San Andreas fault, California, **Hall, C. A.**; Fauna of the Vienna basin and Upper Austria, **Hölzl, O.**; Molluscs from Spain between the upper Miocene and Quaternary, **Jodot, P.**; Mollusca from the Mlava Basin, Serbia, **Jovanović, D.**; Molluscan fauna from the Chikubetsu formation, Hokkaido, Japan, **Kanno & Matsuno**; Mollusca from the Kaspi Mts., Georgia, U.S.S.R., **Kereselidze, D. G.**; Nautiloids from Shimane and Toyama Prefectures, W. Japan, **Kobayashi, T.** (4); Middle Miocene Mollusca of the Marmaroskaky depression, **Korobkov, I. A.** (1); Sarmatian Mollusca from Vienna, **Kühn & Schaffer**; List of molluscs from the upper part of the Kotzakhurskogo horizon, Georgia, **Kvaliashvili, G. A.** (2); Mollusca from the Sangro Valley, Italy, **Malatesta, A.** (2); Pectinidae from the environs of Sendai, Japan, **Masuda, K.** (1); Pectinidae from the Sendai district, **Masuda, K.** (3); Sarmatian Mollusca from Yugoslavia between the R. Mlava, Morava and Resava, **Miletić-Spajić, O.**; Helvetian molluscs from Vaucluse, **Mongin, D.**; Helvetian and Tortonian Mollusca from Montebello, Italy, **Moroni, M. A.** (1); New Mollusca from Maryland and Virginia, **Olekuyshyn, J.**; New cephalopod from Brazil, **Oliveira, P. E. de**; Fauna of Kaschauer Kessels, Czechoslovakia, **Ondrejičková, A.**; Sarmatian Mollusca from the Teleajen valley, Roumania, **Pauliuc, M.**; Mollusca from Cuenca Salina, Mexico, **Perrilliat Montoya, M. C.**; Pontian and Meotian molluscs from East Serbia, **Popović, R.**; Variation and systematic position of Moldavian Sarmatian Nassidae **Roshka, V. K.**; *Sepia vindobonensis*, Tortonian, Austria, **Schaffer, H.**; *Nematurella*, **Schlickum, W. R.**; Burdigalian Mollusca from the Waag river valley, Czechoslovakia, **Seneš, J.** (2); Cardiids from the Miyazaki Group, Japan, **Shuto, T.** (2); New Mollusca from Kazakhstan, **Sidorova, N. P.** (2); Phylogeny of Sarmatian mactrids, **Sidorova, N. P.** (3); Systematics of Sarmatian Mactridae, **Sidorova, N. P.** (4); Molluscs collected from Moçâmedes and Porto Alexandre, Angola, **Silva, G. H. da**; New Mollusca from Hungary, **Strausz, L.** (1) & (2); Mollusca from the upper Tortonian on the eastern slopes of the "Slanske" mts., **Švagrovský, J.**; Tortonian Mollusca from the Colle di Vigoleno, Italy, **Venzo, S.** (2); Mollusca from Georgia, U.S.S.R., **Zhgenti, E. M.**

Oligocene.—Prosobranchia from N.W. Germany, **Anderson, H.-J.** (2); Upper Oligocene in Schleswig-Holstein, **Anderson, H.-J.** (3); Burdigalian Mollusca from North Hungary, **Csepreghy-Meznerics, I.** (1); Volutacea from the collection of the "Institut Royal des Sciences Naturelles de Belgique," **Glibert, M.** (1); An Oligocene subsp. nov of *Batissa* from Japan, figs., **Hayashi, Y.**; New molluscs, North East Russia, **Ilyina, A. P.** (2); New Mollusca, Kazakhstan, **Ilyina, A. P.** (3); New Mollusca from Akhaltsikhe, Georgia, **Kacharava, I. V.**; Hydrobiidae from littoral zones in France, **Mars, P.** (2); Biostratigraphy of the Shashor horizon, Ukraine, (E. Carpathians), **Maximov, A. V.**; A new cardiid from the Kyzyl Kum, Aral district, **Merklin, R. L.**; Corals and pelecypods collected in Ovada (Piemonte), **Sestini, N. P.**

Eocene.—Spanish Mollusca listed, **Bataller, J. R.** (3); Record of a Saccoglossan resembling the recent bivalved gastropods of Japan and Australia, **Chopard, L.**; Ontogeny of the hinge line in Lutetian lamellibranchs, **Freneix, S.** (2); Volutacea from the collection of the "Institut Royal des Sciences Naturelles de Belgique," **Glibert, M.** (1); Marine Mollusca from Jibou near Cluj, Roumania, **Ion, B. Z.**; *Crassatella* new subspecies from the upper Claiborne group Cook Mountain formation, U.S.A., **Kent, L. S.**; Mollusca of the Flagstaff formation in central Utah, **La Rocque, A.** (1); Lutetian fauna of Mount Postale, Venetia, **Malaroda, R.**; Submarine slide and its macrofauna in the central Carpathians, **Marschalko & Volfova**; Mollusca from Porcești, Roumania, **Mészáros, N.**; A new *Gisortia* from Florida, **Palmer, K. V. W.** (2); Occurrence of *Astarte* and *Nipa* in the London clay—an example of paleoecologic dissonance, **Woodring, W. P.**; New Ukrainian Pelecypoda, **Zelinskaya, V. A.**

Cretaceous.—*Corbicula* and *Trigonia* from Suchan, north east U.S.S.R., **Aleksandri-Sadova, T. A.**; The lower Cretaceous Mollusca found near Krivelj and Bučje Yugoslavia, **Antonijević, I.**; *Plagioptychus* from the Campanian of the Pyrenees, **Astre & Baudelot**; Comparison of N.E. Nigeria ammonite faunas with those from N. Peru, **Barber, W.**; Barremian fossils from north of Hanover, **Bartenstein, H.**; History of New Zealand Calyptraeidae, **Boshier, D. P.**; Ammonites from Sacramento Valley, California, **Brown & Rich**; Marine molluscs from Western Australia, **Brunnschweiler, R. O.**; List of Mollusca of Dept. Cundinamarca, Colombia, **Bürgl, H.**; Ammonoidea of the lower Greensand, **Casey, R.** (1); Albian gastropod with fossilized intestines found in the Lower Greensand of Kent and Surrey, **Casey, R.** (2); A new ammonite genus from the upper Gault of S. E. England, **Casey, R.** (3); Cenomanian ammonite zones,

Casey, R. (4); *Parapuzosia* from Austin Chalk in northern Texas, **Clark, D. L.**; British Pleurotomariidae, **Cox, L. R.** (2); Two new radiolitids from the Campanian of Turkey, **Cox, L. R.** (3); Lamellibranchia from the Nubian sandstone series of Egypt, **Cox, L. R.** (7); Turonian *Vascoceras* from Northern France, **Destombes & Sornay**; *Inoceramus* from the Turonian and Cenomanian of Germany, **Dietze, H.**; *Problematicum* from the Middle East, **Elliott, G. F.**; Mollusca from the Chalk of the Crimea and Carpathians, **Eristavi, M. S.**; Lamellibranchs from New Caledonia, **Freneix, S.** (1); Mollusca from Peace River Plains, Alberta, **Gleddie, J.**; Ammonites from Columbia, **Haas, O.**; Purbeckian or Wealden deposits from North east Japan, **Hayami, I.** (1); Pelecypods from the Shishiori group in N.E. Japan, **Hayami & Sugita & Nagumo**; Ammonite extinction in the late Cretaceous, **Holland, C. H.**; Pelecypoda from the Izumi group Japan, **Ichikawa & Maeda**; Albian ammonites from Alaska, **Imlay, R. W.** (1); Valanginian and Hauterivian ammonites from the Pacific Coast States, **Imlay, R. W.** (2); *Pterotrigonia* from the west coast of north America, **Jones, D. L.** (1); Albian fossils from S.W. Oregon and their palaeogeographic significance, **Jones, D. L.** (2); *Inoceramus* from the Colville River, N. Alaska, **Jones & Gryc**; Ammonite bitten by a mosasaur, **Kauffman & Kesling**; Origin of the Pacific island molluscan fauna, **Ladd, H. S.** (1); The Denton Formation in Texas a paleoecological study, **Laughbaum, L. R.**; New Mollusca, North Eastern U.S.S.R., **Liverovskaya, E. V.**; New Pelecypoda and Gastropoda, W. Siberia, **Martinson & Velikzhanina**; Japanese upper Cretaceous fauna and zonation, **Matsumoto, T.** (1); Cenomanian *Graysonites* from Kyushu, **Matsumoto, T.** (2); Gulf Coast Ammonite types, **Matsumoto, T.** (3); Upper Cretaceous ammonites from California, **Matsumoto, T.** (4); Greek molluscs, a general study, **Mitzopoulos, M. K.**; Ammonite from the Gault at Grenoble, **Moret, L.**; Ammonites from the Berriasian of Annecy, **Moret & Deleau**; Mollusca of the Bald Hills formation, California, **Murphy & Rodda**; Trigoniids in the Japanese Islands, **Nakano, M.**; The rudists of North Iran, **Nazemi & Grubic**; Mollusca of Purgatory Creek area, Texas, **Noyes & Young**; Discovery of *Daonella* at Droškovac near Vareš, Yugoslavia, **Pavlović, P.**; *Trigonia* in deposits of the Far East, **Pergament, M. A.**; A new *Trigonia* from the Sundays River beds, Uitenhage series, Cape Province, **Pringle, J. A.**; Turonian ammonites from Lower Silesia, **Radwańska, Z.**; Ammonites from Roumania, **Răileanu & Pelin**; The Mowry shale and contemporary formations in U.S.A. and Canada, **Reeside & Cobban**; Internal structure of ammonites, **Reyment, R. A.** (1); Aptian ammonites, S. Sweden, **Reyment, R. A.** (2); Danian molluscs from Denmark, **Rosenkrantz, A.**; Albian ammonites from West Kazakhstan, **Saltykova & Shlezinger**; Age of *Acanthoceras* and *Romaniceras* in South India, **Sarkar, S. S.** (2); Reported *Acanthoceras* from the *Umia* series of the Ukre beds of Cutch, **Sarkar, S. S.** (3); Campanian—Maastrichtian belemnites from Belgium, **Schmid, F.** (1); New *Trigonia*, E. Urals, **Shcheghlova-Borodina, O. N.**; *Exogyra* study from Coimbra and Figueira da Foz, **Soares, A. F.**; New pectinids from the Dneister river basin, U.S.S.R., **Sobetzky, V. A.**; Gastropoda of Tennessee and Mississippi, U. S.A., **Sohl, N. F.**; Oysters of southwestern N. America, **Stenzel, H. B.**; Mollusca from Dresden-Strehlen, **Tröger & Wolf**; Invertebrates of Southern Plains, Alberta, **Warren, P. S.**; A new Albian ammonite from North West Territories, **Warren & Stelck**; Ammonites from Patagonia, S. America, **Wetzel, W.**; Afghanistan Pelecypoda, **Yabe, Y.**; Techniques of mollusc zonation in Texas, **Young, K.**; Ammonite in the Albian of Hainberg, **Zeiss, A.** (2).

Jurassic.—Albian stage and its belemnites in the Neojurassic of Topal, Roumania, **Bărbulescu, A.**; Marine molluscs from Western Australia, **Brunnschweiler, R. O.**; Sequanian, Kimmeridgian and Portlandian molluscs, Besançon region, **Bulle & Rollet**; Characteristic molluscs of Madagascar, **Collignon, M.**; Mollusca from Tripolitania, **Desio, Ronchetti & Invernizzi**; Bathonian fauna of Garet el-Beliàa limestone, N.W. Tripolitania, Africa, **Desio & Ronchetti**; Tulitidae from the Bathonian of Crussol, France, **Enay, R.** (1); New ammonites from the *Perisphinctes* beds of the Middle Jura, **Enay, R.** (2); Merlerault and Vimoutiers molluscs, **Feray, G.**; Marine shell bed from Raasay, Scotland, **Forsyth, I. H.**; Ammonites from the Lower Jurassic and Bajocian of the Canadian Arctic, **Frebold, H.**; Oxfordian Mollusca of Alberta and British Columbia, **Frebold, Mountjoy & Reed**; Distribution of Laevaptychi in the Oxfordian and Callovian, **Gasiorowski, S. M.**; Ochetoceratinae, **Geyer, O. F.**; Bathonian and Callovian of Bileçik, Turkey, **Granit & Tintant**; Inoceramidae from Japan, **Hayami, I.** (2); Two pelecypods from west Thailand, **Hayami, I.** (5); Pelecypods in North east Japan, **Hayami, Sugita & Nagumo**; Ammonites, **Hölder, H.**; Lamellibranchs and gastropods from Harar, E. Africa, **Jaboli, D.**; Gastropoda of Sainte Croix Mts., Poland, **Karczewski, L.**; Dogger ammonites from S. Hungary, **Kaszap, A.**; Malmian ammonites, Poland, **Malinowska, L.**; New ammonites from the west of the Paris basin, **Maubeuge, P. L.**; Lower Aalanian ammonites from Portugal, **Perrot, C.**; Upper Aalanian cephalopods from Portugal, **Perrot & Mouterde**; Palaeogeography of Andalusia, **Peyre, Y.**; New *Psiloceras*, Okhotsk sea, U.S.S.R., **Polubotko & Chudoley**; Callovian ammonites from Roumania, **Răileanu & Pelin**; Internal structure of ammonites, **Reyment, R. A.** (1); Callovian stratigraphy from Portugal, **Ruget-Perrot, C.** (1); Stratigraphy of the Lusitanian of Portugal, **Ruget-Perrot, C.** (2); New *Myophorella*, Urals, U.S.S.R., **Saveliev, A. A.**; Zone of *Ludwigella concava* in Alsace, **Schirardin, J.**; Giant ammonites from the middle of the Upper Palatinate, **Schnittmann, F. X.**; Supposedly Triassic Mollusca described by Wilckens from New Zealand, assigned to the Jurassic, **Speden, I. G.**; Palaeontological study of the upper Jurassic in S.W. Arabia, **Staesche, K. in Schott, W.**; Mollusca from a coal mine "Jerma" and Zvonačka Banja near the Yugoslavia-Bulgaria border, **Sušić, Z.**; Palaeontology of deposits in Ostrava, Czechoslovakia, **Šuf, J.** (2); Pelecypoda from the Upper Jurassic Soma Group, Japan, **Tamura, M.** (1); *Neoburmesia* and other pelecypods from the Upper Jurassic Soma Group, Japan, **Tamura, M.** (2); Pteriacea from the Soma Group Fukushima Prefecture, Japan, **Tamura, M.** (3); Facies variations around Besançon, Alsace, **Théobald, N.**; Bajocian ammonites from Besançon, Belfort and Vesoul, **Théobald & Bourquin**; Toarcian and Aalenian ammonites from the Lower Rhine at Obernai, **Theobald & Moine**; Oxfordian ammonites from Bourgogne, **Tintant, H.** (1); New ammonite from the Upper Oxfordian (Argovian) of Jura, France, **Tintant, H.** (2); Pelecypods and gastropods from the Yemen, **Van de Poel, L.**; Cephalopoda from Harar, E. Africa, **Venzo, S.** (1)

Lias.—New *Coeloceras* and other ammonites, Gard, France, **Brun, P. de**; Characteristic Mollusca of Madagascar, **Collignon, M.**; Preservation of intestinal parts in *Nuculana*, England, **Cox, L. R.** (5); Ammonites from the Langeneckgrat Prealps, **Donovan, D. T.**; Middle Lias ammonites from near Arbois, Jura, **François & Lehmann**; Dogger ammonites from Württemberg, **Freyberg, B. v.**; Fauna from the region of Salins-les-Bains, **Fuse, J.**; New *Liparoceras* from the Bakony Mts., Hungary,

Géczy, B. (2); Faunal study of the blue Lias of Dorset and Glamorgan, **Hallam, A. (1)**; Gastropods from Higashinagano fm., W. Japan, **Hayami, I. (3)**; Lamellibranchia of the Higashinagano formation W. Japan. **Hayami, I. (4)**; *Dactylioceras tenuicostatum* zone, Toarcian, N.W. and S.W. Germany, **Hoffmann & Martin**; Abnormal ammonite from N.C. Hungary, **Jámbor, Á.**; Marine pelecypods from the Gielniów series, Świety Krzyż Mountains, **Kopik, J.**; Palaeontology of the Upper Lias from Saint-Claude, **Mercier, G.**; Mollusca, Retiche alps, N. Italy, **Pozzi, R. (2)**; Toarcian belemnites statistical and conchometrical study, **Sturz-Köwing, I. (1)**; Changes in the interior of Belemnite rostra in the Upper Lias, **Sturz-Köwing, I. (2)**; Ammonites from the Alpes Apouanes, Italy, **Trevisan, L.**; Revision of ammonites from the Dogger, **Zeiss, A. (1)**.

Trias.—Ammonoidea in the Eastern Carpathians, **Andrusovova-Kollarova, V.**; Currusc, Azizia and Bu Sceba formations of N. Tripolitania, **Desio, Ronchetti & Vigano**; A new *Kalentera* from the Upper Triassic of New Zealand, **Grant-Mackie, J. A.**; Fauna of the Central Himalayas, **Jeannet, A.**; Photonegative young *Lima lineata*, **Jefferies, R. P. S.**; Japanese *Daonella*, **Kobayashi & Tokuyama (1)**; Halobiidae from Thailand, **Kobayashi & Tokuyama (2)**; New Zealand ammonoids, **Kummel, B. (1)**; Ammonoids from Thailand, **Kummel, B. (2)**; Nautiloids from Sinai, Egypt and the Negev, Israel, **Kummel, B. (3)**; Anisian and Ladinian ammonoids from Kuala Lipis, Pahang Malaya, **Kummel, B. (4)**; Mid-Scythian ammonites from Iwai formation, Japan, **Kummel & Sakagami**; Werfenian fauna of the Fiemme Valley, Italy, **Leonardi, P.**; Gastropoda from Cortina d'Ampezzo, **Leonardi & Fiscon**; Mollusca from the Gordon-Cradock district, S. Australia, **Ludbrook, N. H. (1)**; Ammonoid faunas of the Pardonet formation, Peace River Foothills, British Columbia, **McLearn, F. H. (1)**; Revision of Anisian ammonoids, **McLearn, F. H. (2)**; Myophoriidae from Southwest Japan, **Nakazawa, K. (2)**; Mollusca from N.E. Japan, **Onuki & Bandô (1)**; Rifu formation ammonites, N.E. Japan, **Onuki & Bandô (2)**; New Triassic cephalopods, **Popov, Y. N. (1)**; Upper Triassic ammonites and pelecypods from Frantz-Joseph land, **Popov, Y. N. (2)**; *Monophyllites aonis* from Východná Czechoslovakia, **Rakus, M.**; Lamellibranchia from Lombardy, **Ronchetti, C. R. (1)**; Cephalopoda from Esino (Ladinic) of the Grigne Group, Lombardy, **Ronchetti, C. R. (4)**; Middle Muschelkalk stratigraphy from Germany **Rutte, E.**; Mollusca from Southern Czechoslovakia, **Šuf, J. (1)**; Pelecypoda of the Aso formation in west Japan, **Tokuyama, A. (3)**; Pelecypoda from the Hirabara formation in west Japan, **Tokuyama, A. (1)**; Pelecypod fauna of the Hirabara formation in west Japan, **Tokuyama, A. (2)**; Mollusca of Catalania, Spain, **Virgili, C.**; Carnian pelecypods from New Zealand, **Waterhouse, J. B.**; **(1)**; *Mellarium* new pleurotomariid from New Zealand, **Waterhouse, J. B. (2)**; A new ammonite from the Muschelkalk of Germany, **Wunsch, L. P.**

Mesozoic.—Phylogeny, evolution, classification and stratigraphic positions of Mesozoic Ammonoids, **Arkell, Kummel & Wright (in Moore)**; Mollusca from the Lualaba beds, Belgian Congo, **Cox, L. R. (8)**; Characters and relationships of the Mesozoic pelecypod *Pseudavicula*, **Dickins, J. M. (1)**; Mollusca from W. Chugoku and N. Kyushu, Japan, **Hase, A.**; Systematics of ammonites and belemnites, **Krymgol'ts, G. Y.**; Non marine Mollusca of the Kwanmon group, **Ota, Y. (1)**; Gastropods from the Inkstone series of the Kwanmon Group, **Ota, Y. (2)**; New Noric Molluscs from Val Cancano, Italy, **Pozzi, R. (1)**; Mollusca from Italy, **Selli, R.**; Systematics of early Mesozoic nautiloids, **Wiedmann, J.**

Permian.—Ammonoids from Kwangsi, China, **Chao, K.**; *Merismopteria* and the origin of the Pteriidae, **Dickins, J. M. (2)**; Mollusca of Grinnell Peninsula, Devon Island, Canadian Arctic, **Harker & Thorsteinsson**; New *Foordiceras*, Kitakami Mts., Japan, **Hayasaka, I.**; Ammonites from the Central Himalayas, **Jeannet, A.**; Notes on molluscs of north east U.S.S.R., **Kashirtzev, A. S.**; New Pelecypoda, Kazakhstan, **Lyutkevich & Lobanova**; New Pelecypoda, S. Paulo, Brazil, **Mendes, J. C.**; Nautiloids from Japan, **Nakazawa, K. (1)**; Myophoriidae from South west Japan. **Nakazawa, K. (2)**; Pelecypoda, Middle Urals, **Nelzina, P. E.**; *Mongoloceras* new ammonite, Mongolia, **Ruzhentzev, V. E. (2)**; Gastropods of S.W. United States, **Yochelson, E. L. (2)**.

Carboniferous.—Mississippian Mollusca of New Mexico, **Armstrong, A. K.**; Non-marine lamellibranchs from East Fife, Scotland, **Bennison, G. M.**; The super-zone R_1 in the Berwinne and Geule Valleys, Belgium. **Bouckaert, J.**; Mississippian species of *Conocardium*, **Branson, C. C. (1)**; Marine clam in fresh-water sediments in Oklahoma, **B[ranson], C. C. (3)**; List of Pelecypoda & Gastropoda, Colombia, Dept. Cundinamarca, **Bürgl, H.**; Goniatite zones of Devon and Cornwall reviewed, **Butcher & Hodson**; Namurian goniatites of N. France, **Chalard, J. (1)**; *Hudsonoceras* from Northern France, **Chalard, J. (2)**; Mollusca from Moravia, **Chlupáč, I.**; Fauna of the Westphalian D., **Deleau, P. C.**; *Goniatites* from Portugal, **Delépine, G.**; Palaeoecology of non-marine lamellibranchs, **Eagar, R. M. C.**; Marine Mollusca N. America and Europe, **Elias, M. K.**; Ammonoids, N.W. Australia, **Glenister, B. F.**; American mid-continent cephalopods, **Gordon, M.**; New occurrence of mollusc fauna in the Bardo Mts., Wojbórz (L. Silesia), **Gunia & Górecka**; Goniatite zones of the Visean and Namurian, **Hartung & Patteisky**; Fauna from the Tensleep sandstone of Desmoinesian age in Wyoming, **Hoare & Burgess**; Non marine lamellibranchs from the coal measures of Pembrokeshire, **Jenkins, T. B. H.**; Revision of the Nuculanidae from the Ostrava-Karviná District, **Kumpera, Prantl & Růžička**; Namurian *Homoceras* from the province of Liège, Belgium, **Lambrecht & Leckwijck**; Bearpaw Shale, Lethbridge area, Alberta, **Link & Childerhose**; A new pelecypod from the Permo-Carboniferous of Alberta Canada, **McGugan, A.**; Goniatites from Caballeros Canyon, Mexico, **Murray, Furnish & Carrillo**; Upper Mississippian ammonoids from N.W. Canada, **Sellers & Furnish**; Lower and middle Carboniferous Mollusca from the Don basin, **Sergheeva, M. T.**; Pelecypod distribution in the Donetz basin, U.S.S.R. (lists), **Shul'gha, P. L.**; Pottsville and Allegheny fossiliferous beds of W. Pennsylvania, **Williams, E. G.**; Lamellibranch type nomenclature revised, **Wilson, R. B. (1)**; New Pelecypoda, Moscow basin, **Yanishevskii, M.E.**; Gastropoda from Alaska, **Yochelson & Dutro**; Visean molluscs, Poland, **Zakowa, H. (2)**.

Devonian.—Nautiloidea from Russia, **Balashov, E. G. (1)**; Ammonoids from the Famenian of the Urals, **Bogoslovsky, B. I.**; Tentaculites in Czechoslovakian stratigraphy, **Boucek & Prantl**; Mollusca of the Littleton formation of New Hampshire, **Boucot & Arndt**; New *Hercynella* from the Polar Urals, **Chernov, G. A.**; Diagnoses of early ammonoid families, subfamilies and genera revised, **Erben, H. K.**; Mollusca from Planitz near Zwickau, **Hösel, G.**; Ammonoids from Dartmoor, Devonshire, **House, M. R. (1)**; Abnormal growths in goniatites from N. Cornwall, **House, M. R. (2)**; Pelecypoda of the N.E. Pri-Balkhash, U.S.S.R., **Krasilova, I. N.**; New ammonites, Cantabrica Mts., Spain, **Kullmann, J.**; Coniconchia of the Russian platform, **Lyashenko, G. P.**; Clymeniid from the *Wocklumeria* zone,

New South Wales, **Pickett, J. W.**; *Hercynella* systematics, **Prantl, F.**; Goniatite from *Tentaculites* beds, **Schindewolf, O. H. (2)**; Ammonite faunas of the Devonian-Carboniferous boundary beds from Launceston, Cornwall, **Selwood, E. B.**; Stratigraphy of the Naples Group (Late Devonian) in W. New York, **Sutton, R. G.**

Silurian.—Additions to the fossil catalogue of the Hunton group, Oklahoma, **Amsden, T. W.**; Nautiloidea from Russia, **Balashov, E. G. (1)**; Mollusca from the Sutherland River formation, Devon Island, Canadian Arctic, **Boucot, Martinsson, Thorsteinsson et al**; *Conocardium* from the Hunton Group Oklahoma, **Branson & Amsden**; Pelecypoda of the N.E.-Pri-Balkhash, U.S.S.R., **Krasilova, I. N.**; Succession of shelly faunas in the British Ludlovian, **Lawson, J. D.**; Lamellibranchs from New South Wales, **Sherrard, K.**

Ordovician.—Nautiloidea from Russia, **Balashov, E. G. (1)**; Nautiloid fauna from Mishina Gora identical with that of Oeland Isle, Scandinavia, **Balashov, E. G. (2)**; Loricates from N. America, **Bergenhayn, J. R. M.**; New nautiloids from Inner Mongolia, **Chang, Z.**; Llanvirn pelecypods from Osek (near Rokycany), Bohemia, **Horný, R.**; Chazyan fauna from the Lower Tyner, N.E. Oklahoma, **Huffman & Starke**; Mollusca from South Korea, **Kobayashi, T. (1)**; Formations and faunas of South Korea, **Kobayashi, T. (2)**; Mollusca from Northern Malaya, **Kobayashi, T. (3)**; A new *Modiolopsis* from the Sahara, **Legrand, Poueyto & Rouaix**; Middle Ordovician of the Oslo Region, Norway, **Soot-Ryen, H. & T.**; Size of Endoceratida from the Middle Ordovician, **Teichert & Kummel.**

Cambrian.—Loricates from N. America, **Bergenhayn, J. R. M.**; Molluscan fauna of South Korea, **Kobayashi, T. (1)**; Formations and faunas of South Korea, **Kobayashi, T. (2)**; Dresbachian and Franconian faunas from Wyoming, **Lochman & Hu**; Late middle Cambrian mollusca from Mendoza, Argentina, **Poulsen, C.**; Hyolithid ecology, Siberia, **Sysoev, V. A. (2).**

Palaeozoic.—An unusual spine bearing gastropod from the Excello Shale Oklahoma, **Branson, C. C. (2)**; Eastern Pyrenees, **Cavet, P.**; A rare chiton from the Francis formation, Ada, Oklahoma, **Frederickson, E. A.**; Middle Palaeozoic formations in Korea and Northeast China, **Hamada, T.**; Classification and general descriptions of Palaeozoic Ammonoidea, **Miller, Furnish & Schindewolf [in Moore]**; Barrande's pelecypods from the Barrandian of Central Bohemia, **Růžička & Prantl**; Siluro-Devonian history of central and west Texas, **Wilson & Majewske.**

III.—SYSTEMATIC INDEX

N.B.—FULL REFERENCES CAN BE FOUND WHEN THEY ARE NOT GIVEN IN THIS INDEX BY REFERENCE TO "TITLES" UNDER THE NAME OF THE AUTHOR GIVEN IN THE SYSTEMATIC INDEX AND THE NUMBER OF THAT AUTHOR'S PAPER WHERE MORE THAN ONE IS RECORDED.

Note.—The arrangement here used follows in general that of Thiele's "Handbuch" The most important differences are that Epitonacea *and* Pyramidellacea *are placed immediately preceeding* Muricacea *in order of grouping and the Families* Triviidae *and* Eratoidae *are placed in* Lamellariacea. The fossil Cephalopoda is arranged in general according to Tome 2 of "Traité de Paléontologie" J. Piveteau. When more than one page is given in a reference, the one in roman type is where the new name first occurs and the one in *italic* is where the gen., sp., or var. is actually described.

MONOPLACOPHORA

Monoplacophora structure, relationships and descriptions of fossil and recent forms, **Knight & Yochelson.**

†*Cambridium nikiforovae* & *C. cernysevae* phylogenetic position, **Lemche, H.**

†*Hypseloconus coreanicus* **sp. nov.** p. 340, pl. XIX, figs. 9a–b; South Korea, Chuangia zone Cambrian, **Kobayashi, T. (2)**; *H. simplex* from the Du Noir limestone, Cambrian of Wyoming, **Lochman & Hu.**

Neopilina (*N.*) *galatheae* in a critical review of living Monoplacophora, **Peliksiak, S.**

AMPHINEURA

Amphineura systematics and phylogeny, **Müller, A. H.**; General structure and systematic descriptions of fossil and recent forms, **Smith, A. G. (3).**

Polyplacophora

Polyplacophora structure, descriptions and key to Danish species, **Muus, B. J.**

CHITONACEA

Acanthochiton curvisetosus **sp. nov.** p. 29, fig. 1, pl. 1, fig. 2; Eylath, Red Sea Coast, **Leloup, E. (1)**; *A. fascicularis* radula fig'd. p. 30, **Muus, B. J.**

Callochiton laevis associated with *Lithophyllum* off the N.W. French coast, **Bénard, F.**

†*Chelodes intermedius* p. 174, text—fig. I, 11–14; Scott County, Virginia; *C. depressus* p. 175, text-fig. I, 15–16; Franklin County, Missouri; L. Ordovician; **Bergenhayn, J. R. M.**

Chiton spp. in Hawaii, **Gudnason, K.**; *Chiton corralinus* first record from the Red Sea, **Leloup, E. (1).**

†*Helminthochiton* sp. a rare fossil from the Francis formation, Ada Oklahoma, **Frederickson, E. A.**

Icoplax chathamensis **sp. nov.** p. 153; text-fig. 1; Cape Pattison, Hanson Bay, Kaingaroa, Chatham Islands, **Dell, R. K.**

Mopalia hindsi recurvans, pp. 37, *38*; pl. 6, figs 2–7, **subsp. nov.** San Francisco Bay, **Barnawell, E. B.**

†Preacanthochitonidae **fam. nov.** p. 169 of Chelodina; *Preacanthochiton* **gen. nov.** p. 169, type sp. *P. cooperi*, p. 169, text-fig. I, 1–3; U. Cambrian—L. Ordovician; Missouri; *P. depressus*, p. 173, text-fig. I, 4–6; L. Ordovician, Missouri; *P. productus*, p. 173, text-fig. I, 7–8; Upper Cambrian, Missouri; **spp. nov., Bergenhayn, J. R. M.**

Schizoplax brandtii biological peculiarities from the Kurile Islands, **Kussakin, O. G.**

Aplacophora

Aplacophora structure of and keys to Danish species; figs. & descriptions, **Muus, B. J.**

Neomenia carinata developmental study, **Thompson, T. E. (3).**

GASTROPODA

Gastropoda, Biology, morphology, ontogeny, evolution and classification, **Cox, L. R. (6)**; Key to genera of S. African freshwater and estuarine Gastropoda, **Eeden, J. A.**; Marine forms of the Line Islands, **Jewell, jr. H. G.**; Catalogue of Austrian species with synonymy and distribution notes, **Klemm, W. (3)**; Mollusca of the Crimea, systematic study, **Likharev, I. M. (1)**; Systematics and phylogeny of the Gastropoda, **Müller,**

A. H.; Lithuanian Gastropoda described & figured, **Sivickis, P.**; Gastropoda in the Pavlovic collection, Beograd Museum, **Tomić, V.**; Fossil types from G. Brocchi's Apennine collection, figs., **Ronchetti, C. R. (2)**; †*Paleodictyon* are they the imprints of gastropod eggs? **Fischer, P. H. (6)**.

†*Semicircularea arcuata* from the Upper Cambrian of Wyoming. Gastropoda, Pelagiellacea, **Lochman & Hu.**

Prosobranchiata

Archaeogastropoda, Mesogastropoda and Neogastropoda, life histories, **Anderson, D. T.**; Archaeogastropoda, systematic descriptions & illustrations, **Knight, Cox, Keen et al**; Prosobranchia from Afognak and Sitkalidak Islands, Kodiak Group Alaska (List), **Eyerdam, W. J. (2.)**

BELLEROPHONTACEA

†*Bellerophon borissiaki* Toumanskaya **sp. nov.** p. 276, pl. 1, fig. 10 a, b; Permian, Crimea, genus see p. 62, **Pchelintzev & Korobkov [in Orlov]**; *B.* (*B.*) *huccoensis* p. 259, pl. 52, figs. 9–19, 21; *B.* (*B.*) *oteroensis* p. 260, pl. 53, figs. 10–12; *B.* (*B.*) *lineatus* p. 260, pl. 52, figs. 20, 22–26; *B.* (*B.*) *parvicristus* p. 261, pl. 51, figs. 1–9, 11–13, 18; *B.* (*B.*) *complanatus* p. 263, pl. 50, figs. 13–16; *B.* (*B.*) *plummeri* p. 265, pl. 52, figs, 1–8; *B.* (*B.*) *kingorum* p. 266, pl. 50, figs. 1–9, 11, 12; *B.* (*B.*) *hilli* p. 267, pl. 53, figs. 1–9; *B.* (*Pharkiodontus*) *westi* p. 268, pl. 50, figs. 17–20; **spp. nov.** Permian, North Central Texas, West Texas area, New Mexico and Arizona, **Yochelson, E. L. (2).**

†*Bucania gemmelaroi* Toumanskaya **sp. nov.** p. 276, pl. 1, figs. 8a, 8b; *B. kussicum* Toumanskaya **sp. nov.** p. 276, pl. 1, fig. 9; Crimea; Permian, genus see p. 61, **Pchelintzev & Korobkov [in Orlov]**.

†Crossostomatidae **fam. nov.** p. I 301; Craspedostomatacea Wenz, 1938. For *Crossostoma* Morris & Lycett 1851 & *Palaeocollonia* Kittl 1899. **Cox, in Knight, Cox, Keen et al.**

†*Euphemites imperator* p. 247, pl. 46, figs. 18–22; pl. 48, fig. 27; Permian, West Texas area, *E. kingi* p. 248, pl. 47, figs. 5–11; *E. exquisitus* p. 248, pl. 46, figs. 4–9; *E. crenulatus* p. 249, pl. 47, figs. 22–28; *E. batteni* p. 249, pl. 46, figs. 10–17; *E. luxuriosus* p. 250, pl. 47, figs. 1–4; *E. sparciliratus* p. 251, pl. 47, figs. 12–19; **spp. nov.** Permian, West Texas, New Mexico, Arizona, **Yochelson E. L. (2).**

†*Euphemitopsis* **gen. nov.** of Euphemitinae p. 235, type species. *E. multinodosa* **sp. nov.** pp. 235, 252; pl. 48, figs. 1–12; *E. paucinodosa* p. 253, pl. 47, figs. 38–41; **sp. nov.** Permian, N. and W. Central Texas, **Yochelson, E. L. (2).**

†*Knightites* (*Knightites.*) *bransoni* p. 270, pl. 53, figs. 13–17; *K.* (*K.*) *medius* p. 271, pl. 53, figs. 22, 23; *K.* (*K.*) *maximus* p. 271, pl. 54, figs. 10–17; *K.* (*Retispira*), *eximia* p. 273, pl. 55, figs. 1–37; *K.* (*R.*) *fragilis* p. 274; pl. 54, figs. 1–6, 9; *K.* (*R.*) *girtyi* p. 276, pl. 56, figs. 4–8. *K.* (*R.*) *texana*, p. 277, pl. 57, figs 14–16, 20–27; **spp. nov.** Permian, Texas, New Mexico, **Yochelson, E. L. (2).**

†*Patellilabia junior* **sp. nov.** p. 279, pl. 53, figs. 18–21; Permian, North Central Texas, **Yochelson, E. L. (2).**

†*Sinuitina keytei* **sp. nov.** p. 246, pl. 46, figs. 1–3; Leonard formation Permian, Glass Mountains, W. Texas, **Yochelson, E. L. (2).**

†*Waagenella poliac* Toumanskaya **sp. nov.** p. 276, pl. 1, figs. 11a & b; Crimea, Permian, genus see p. 63, **Pchelintzev & Korobkov [in Orlov].**

†*Warthia crassus* p. 255, pl. 49, figs. 14–20; *W. welleri* p. 255, pl. 48, figs. 20–26; *W. waageni* p. 256, pl. 49, figs. 21–26; *W. angustior* p. 256, pl. 49, figs. 1–6; *W. fissus* p. 258, pl. 48, figs. 15–19; *W. saundersi* p. 259, p. 49, figs, 9–13; **spp. nov.** Permian, N. central Texas, W. Texas, New Mexico, **Yochelson, E. L. (2).**

EUOMPHALACEA

†*Amphiscapha* (*Cylicioscapha*) *grada* **sp. nov.** p. 134, pl. 12, figs. 27–29; Howard Pass Permian Alaska, **Yochelson & Dutro.**

Euomphalus cirridioides Kittl 1894 proposed to be placed on the Official List of Specific Names, **Cox, L. R. (10).**

†*Helicotoma jonesi* p. 394, pl. 1, fig. 5; pl. 26, figs. 5a–b; pl. 27, figs. 9a–c, text-figs. 3b, e; *H.* (?) *costata* p. 395, pl. 25, figs. 1a–c; text-fig. 3d; Ordovician, **spp. nov.** Langkawi Islands, Malaya, **Kobayashi, T. (3).**

†*Lesueurilla zonata* **sp. nov.** p. 397, pl. 24, figs. 6a–d; text-fig. 3f; Pulau Langkawi Islands Malaya, Ordovician, **Kobayashi, T. (3).**

†*Lytospira rectangularis* **sp. nov.** p. 399 pl. 25, figs. 5a–c; Ordovician, Thye San Mine, Perlis, Malaya, **Kobayashi, T. (3).**

†*Palaeomphalus giganteus* **sp. nov.** p. 395, pl. 25, figs. 2a–c, 3a–c; pl. 26, figs. 3a–c; text-fig. 3a; Langgon, Langkawi Islands, Malaya; Ordovician, **Kobayashi, T. (3).**

†*Poleumita globosa* from the Ludlovian of Britain. **Lawson, J. D.**

†*Schizostoma ladinum* **sp. nov.** p. 19 pl. 2, fig. 6; Alpe di Specie (Prato Piazza) Prov., Trias, Cortina d'Ampezzo, Italy, **Leonardi & Fiscon.**

†*Straparollus* (*Euomphalus*) *brookensis* p. 133, pl. 12, figs. 15, 20–23; Misheguk Mountain quadrangle between Iligluruk Creek and Kugururok River, Carboniferous; *S.* (*E.*) *alaskensis* p. 133, pl. 12, figs. 10–14, 16–19; Chandler Lake **spp. nov.** Permian, Alaska, **Yochelson & Dutro.**

†Weeksiidae **fam. nov.** p. 50, Euomphalacea, to include, *Weeksia* Stephenson, *Discohelix* Dunker & *Amphitomaria* Koken, **Sohl, N. F.**

Woehrmannia Boehm 1895 type-species here designated as *W. boehmi* Kittl 1899; *Woehrmannia* and *boehmi* to be placed on official lists of generic and specific names respectively, **Cox. L. R. (10).**

PLEUROTOMARIACEA

†*Bathrotomaria wrighti* p. 400, pl. 45, figs. 4a–d; Neocomian, Lincolnshire; *B. swinnertoni* p. 401, pl. 45, figs. 2a, b, 3; Hauterivian, Lincolnshire; *B. nettletonensis* p. 401, pl. 46, figs. 1a–c; Neocomian, Lincolnshire; *B. speetonensis* p. 402, pl. 45, figs. 5, 6a, b; Neocomian, Yorkshire; *B. atherfieldensis* p. 402, pl. 46, figs. 2a, b; Lower Aptian, Isle of Wight; *B. leightonensis* p. 403, pl. 48, figs. 3a, b, 4; Lower Albian Bedfordshire; *B. dixoni* p. 404, pl. 55, figs. 1a–c, 2; Cenomanian, Kent; *B. ashburneri* p. 405, pl. 56; Cenomanian Buckinghamshire; **spp. nov.** Cretaceous, **Cox. L. R. (2).**

†*Bembexia* (?) *inumbilicata* **sp. nov.** p. 138 pl. 13, figs. 30, 31; Chandler Lake, Monotis Creek, Carboniferous Alaska, **Yochelson & Dutro.**

†*Conotomaria seendensis* p. 409, pl. 47, figs. 2a–d; Upper Aptian, Wiltshire; *C. lamplughi* p. 410, pl. 48, figs. 5a–c; Lower Albian, Bedfordshire; *C. folkestonensis* p. 410, pl. 49, figs. 4a, b; Albian, Kent; *C. chardstockensis* p. 411, pl. 50, figs. 11, 12a–c; Cenomanian, Dorset;

C. percevali p. 411, pl. 57, figs. 2a, b; Cenomanian, Devon *C. laticarinata* p. 412, pl. 53, figs. 1a–c Cenomanian, Devon **spp. nov.** Cretaceous, **Cox, L. R. (2).**

†*Echinocirrus* Ryckholt 1860—like shell from the Paleozoic of Oklahoma, **Branson, C. C. (2).**

†Kittlidiscidae **fam. nov.** p. I 217 for *Kittlidiscus* Haas, 1953; Pleurotomariacea Mid Trias, **Cox, in Knight, Cox, Keen et al.**

†Laubellidae **fam. nov.** p. I 217 for *Laubella* Kittl, 1891, Pleurotomariacea, Middle Trias, **Cox in Knight, Cox, Keen et al.**

†*Leptomaria donningtonensis* p. 396, pl. 46, figs. 3, 4; Hauterivian, Lincolnshire: *L. willinghamensis* p. 396, pl. 46, figs. 7a, b; Hauterivian, Lincolnshire; *L. billingtonensis* p. 397, pl. 48, figs. 7a–d; Lower Albian, Bedfordshire; *L. pricei* p. 398, pl. 49, figs. 8a–c; Albian, Kent; *L. seatonensis* p. 398, pl. 54, figs. 1a, b, 2; Cenomanian, Devon; *L. axmouthensis* p. 399, pl. 52, figs. 4a, b, 5a, b; Cenomanian, Devon; *L. wilmingtonensis* p. 399, pl. 51, figs. 5, 6a, b; Cenomanian,Devon; *L. hindei* p. 400, pl. 51, figs. 1a–c; Cenomanian, Wiltshire, **spp. nov.** Cretaceous, **Cox, L. R. (2).**

†*Mellarium* **gen. nov.** p. 271, Pleurotomariidae, type sp. *M. mutchi* **sp. nov.** p. 272, figs. 3–12; *M. nodulosum* **sp. nov.** p. 276, figs. 15–22; (Anisian) Triassic, Beaumont Stream & N. Etal Creek, New Zealand, **Waterhouse, J. B. (2).**

†*Mourlonia minuta* p. 136, pl. 13, figs. 4, 5; Misheguk Mountain, Utukok River, Carboniferous; *M.* (?) *reloba* p. 136, pl. 13, figs. 6–9; Misheguk Mountain Nuka River, Permian **spp. nov.** Alaska, **Yochelson & Dutro.**

†Murchisoniacea Pchelintzev **superfam. nov.** p. 117, for the families Murchisoniidae, Hormotomidae, Omospiridae, Pithodeidae, Ordovician to Triassic, **Pchelintzev & Korobkov [in Orlov].**

†*Nodospira* **gen. nov.** p. 137, Eotomariidae type species *N. ornata* **sp. nov.** p. 137, pl. 13, figs. 14–17; Chandler Lake, Kiruktagiak River, Carboniferous Alaska, **Yochelson & Dutro.**

Pleurotemaria Carpenter 1861 erroneous subsequent spelling of *Pleurotomaria* Defrance 1826 placed on Official List of Rejected Names, **Opinion 582.**

Pleurotomaria Defrance 1826, type species by designation by S. P. Woodward 1851, *Trochus anglicus* J. Sowerby 1818 is placed on the Official List of Generic Names; *Pleurotomaria* Ferussac 1822 is placed on the Official List of Rejected Names, a nomen nudum; *Pleurotomaria* J. Sowerby 1821 validation refused, the name being technically unavailable and placed on Official Index of Rejected Names, **Opinion 582.**

†*Pleurotomaria* (s.s.) *toulmini* p. 392, pl. 46, fig. 5; Aptian, Kent; *P. shenleyensis* p. 393, pl. 48, figs. 6a–d; Lower Albian, Bedfordshire; *P. vectensis* p. 394, pl. 50, figs. 8, 9, 10a–c, Upper Albian, Isle of Wight; *P. rockenensis* p. 395, pl. 51, figs. 2a–c, 3, 4a, b; Lower Cenomanian, Isle of Wight; Cretaceous **spp. nov.**; *P.* (s.l.) *spilsbyensis* p. 413, pl. 44; pl. 45, fig. 1; Neocomian, Lincolnshire; *P. glyndensis* p. 414, pl. 53, figs. 2a–c; Cenomanian, Sussex; **spp. nov.** Cretaceous, **Cox, L. R. (2)**; *P. bittneri alta* **var. nov.** p. 7 pl. 1, fig. 2; Pocol and Rumerlo Prov., *P.* n.sp. aff. *platypleura* p. 8, pl. 1, fig. 3; Cianzopè Prov., *P.* (?) *dolomitica* **sp. nov.** p. 9, pl. 1 fig. 4; Vervei Prov., Trias, Italy, **Leonardi & Fiscon.**

Pleurotomariae Swainson 1840, invalid original spelling of Pleurotomariidae is placed on the Official Index of Rejected and Invalid Names, **Opinion 582.**

Pleurotomariidae (correction by King 1850 of Pleurotomariae) Swainson 1840, (type genus *Pleurotomaria* Defrance 1826) is placed on the Official List, **Opinion 582.**

Pleurotomarium de Blainville 1825 placed on the Official List of Rejected Names for the purposes of the Law of Priority, **Opinion 582.**

†Raphistomacea Pchelintzev **superfam. nov.** p. 76, for the families Raphistomatidae, Euomphalopteridae, Helicotomidae and Sinuopeidae, Cambrian to Carboniferous, **Pchelintzev & Korobkov [in Orlov].**

†Schizogoniidae **fam. nov.** p. I 217 for *Schizogonium* Koken, 1889 and *Pseudoschizogonium* Kutassy, 1937, Pleurotomariacea, Middle-Upper Trias, **Cox, in Knight, Cox, Keen et al.**

†*Sisenna ampezzana* **sp. nov.** p. 11, pl. 1, fig. 10; Trias, Costalares & Vervei Prov., Cortina d'Ampezzo, Italy. **Leonardi & Fiscon.**

†*Stuorella tofanae* p. 12, pl. 1, figs. 13–14; Cianzopè; *S. costalaricensis* p. 13, pl. 1, fig. 15; Costalares; **spp. nov.** Trias, Cortina d'Ampezzo, Italy, **Leonardi & Fiscon.**

†Temnotropidae **fam. nov.** p. I 219, for *Temnotropis* Laube, 1870; Pleurotomariacea, Mid-Upper Trias, **Cox, in Knight, Cox, Keen et al.**

†*Temnotropis bicarinata tetracostulata* **var. nov.** p. 14, pl. 1, fig. 16; Pocol and Rumerlo Prov., Trias, Italy, **Leonardi & Fiscon.**

†Triangulariinae Vostokova **subfam. nov.** [in Pchelintzev & Korobkov] of Pleurotomariidae for *Triangularia* Frech 1894 p. 73, pl. 4, fig. 8; Devonian, **Pchelintzev & Korobkov [in Orlov].**

†Trochotomidae **fam. nov.** p. I 220 for *Trochotoma* Eudes-Deslongchamps, 1843 & *Valfinia* Cox, 1958; Pleurotomariacea, Triassic-Jurassic, **Cox, in Knight, Cox, Keen et al.**

†*Turbonellina* (?) *lata* **sp. nov.** p. 135, pl. 12, figs. 30–33; Howard Pass, Kuna River Valley, Carboniferous Alaska, **Yochelson & Dutro.**

†*Worthenia politschi* Toumanskaya **sp. nov.** p. 280, pl. 3, fig. 1 Crimea, Permian, genus see p. 66. **Pchelintzev & Korobkov [in Orlov].**

†Zygitidae **fam. nov.** p. I 217 for *Zygites* Kittl, 1891; Mid. Trias, **Cox, in Knight, Cox, Keen et al.**

HALIOTIDACEA

Exohaliotis cyclobates fig. 3, distribution in Australian waters, **Cotton, B. C. (4).**

Fissurella volcano trace elements in modern and fossil shells, **Krinsley, D.**; *F. barbadensis* life history, larval stages and habitat, **Lewis, J. B.**

Haliotis lamellosa electron microscope studies of yolk globules in oocytes, **Bolognari, A. (1)**; *H. lamellosa* nuclear apparatus during early oology, **Bolognari, A. (3)**; *H. cracherodii* possible establishment in Hawaiian waters, **Brock, V. E.**; *H. rufescens, H. cracherodii, H. corrugata* & *H. fulgens* general study from Baja California, **Buen, F. de**; *H. rufescens, H. corrugata, H. fulgens, H. cracherodii, H. wallallensis, H. kamtschatkana, H. sorenseni* & *H. assimilis* from California, **Cox, K. W.**; *H. corrugata, H. rufescens, H. fulgens, H. cracherodii, H. assimilis, H. wallalensis, H. kamtschatkana,* & *H. sorenseni* in California, **Gilmore, R. M.**; *H. discus hannai* & *H. sieboldii* viscera responsible for human dermatitis on exposure to sunlight, **Hashimoto, Naito & Tsutsumi**; *H. rufescens* a juvenile example without respiratory apertures, **Leighton, D. L.**; *H. coccoradiata* variations on the S.E. coast of Australia, **Talmadge, R. R. (2).**

Haliotidae of Australia, list, key to genera and 20 figs. with notes and distribution records, **Cotton, B. C. (4);** Haliotidae, A hypothesis relative to the former continent Gondwana, **Talmadge, R. R. (1).**

Marinauris roei fig. 4, *M. melculus* fig. 12, *M. brazieri* fig. 13, *M. hargravesi* fig. 14 distribution Australian waters, **Cotton, B. C. (4).**

Neohaliotis scalaris fig. 5; *N. emmae* fig. 6; *N. semiplicata* fig. 15; distribution in Australian waters, **Cotton, B. C. (4).**

Notohaliotis improbula fig. 7; *N. ruber* fig. 8; *N. conicopora* fig. 9; *N. vizlirata* fig. 10; *N. coccoradiatum* fig. 11, Australian distribution, **Cotton, B. C. (4).**

Ovinotis ovina fig. 20, Australian distribution, **Cotton, B. C. (4).**

Sanhaliotis elegans fig. 19; *S. astricta* fig. 18; *S. squamata* fig. 17; *S. aliena* fig. 16; distribution in Australia, **Cotton, B. C. (4).**

Schismotis laevigata fig. 2, Australian waters, **Cotton, B. C. (4).**

Teinotis asinina fig. 1, Australian distribution, **Cotton, B. C. (4).**

PATELLACEA

Acmaea jamaicensis on the shores of Barbados, W. Indies, **Lewis, J. B.**

†*Acmaea galea* **sp. nov.** p. 52 pl. 5 f. 34, 39, Coon Creek, McNairy Co., Tennessee, U.S.A., Upper Cretaceous **Sohl, N. F.**

Lepeta concentrica mantle cavity, habits and habitat, **Yonge, C. M. (1.)**

†*Lepetopsis patella* **sp. nov.** p. 280, pl. 57, figs. 1, 2, 4-7; *L.* (?) *beedei* **sp. nov.** p. 282, pl. 57, figs. 17–19; Permian, West Texas area, **Yochelson, E. L. (2).**

†*Metoptoma texana* **sp. nov.** p. 280, pl. 56, figs. 9–14, Permian, West Texas area, **Yochelson, E. L. (2).**

Patella coerulea ribo nucleic acid study of the cells of Walker's tumour, **Bolognari, A. (2);** *P. coerulea* studies on the nucleus during egg developmental stages, **Bolognari, A. (3);** *P. coerulea* ovocyte nucleoli, enzymes and growth, **Bolognari, A. (5);** *P. coerulea* electron microscope study of yolk formation in oocytes, **Bolognari, A. (6);** *P. pontica* pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2);** *P. vulgata* β-glucuronidase activity and arylsulphatase, **Corner, Leon & Bulbrook;** *P. vulgata* identification of water soluble choline, betaine and glyceryl-phosphorylcholine in tissues, **Etienne, J.;** *P. vulgata*, biochemistry of choline derivatives in particular phosphatidylcholines, **Etienne & Kahane;** *P. intermedia* & *P. vulgata* from the littoral zone of S. Portugal, **Fischer-Piette, E. (2);** *P. coerulea* first report from the Sea of Pescara, Adriatic, **Pepe, G.;** *P. vulgaris* cytology of the hepatopancreas, **Vasconcelos Frazao, J. (1);** *P. vulgaris* glandular epithelium of the hepatopancreas, **Vasconcelos Frazao, J., (2).**

†*Pseudorhytidopilus* **gen. nov.** p. I 237, f. 151, 2a, b (pro. Haber 1932 nom nud.); *P. lennieri* **sp. nov.** p. I 237 (pro Haber 1932 nom. nud.) (= *Helcion castellana* Lennier, 1868, non *Patella castellana* Thurmann & Etallon, 1861) (?) Patellina, family uncertain, Jurassic, **Cox, in Knight, Cox, Keen et al.**

TROCHACEA

Alertalex Dell type o.d. *A. blacki* Dell thought to belong to *Calliostoma* s.s., **Clench & Turner (1).**

Astele subgen. of *Calliostoma* with subgenotype *C.* (*Astele*) *subcarinata* Swainson, monotypic, synonymy, shell jaw and radula figured, **Clench & Turner (1).**

†*Astraea hayakawai* **sp. nov.** p. 208 pl. 6, figs. 1–4; Tochiya, Chichibu-City Japan, Miocene, **Kanno, S.**

†*Astralium damon monocarinatum* **var. nov.** p. 20, pl. 2, fig. 4; Pocol and Rumerlo Prov., Trias, Italy, **Leonardi & Fiscon.**

†*Basilissa* (*Orectospira*) *nenokamiensis* **sp. nov.** p. 209, pl. 6, figs. 11–12; Nenokami Hikokubo, Japan, U. Oligocene, **Kanno, S.**

†*Bolma hataii* **sp. nov.** p. 34, pl. 7, figs. 5, 9, 14; Miocene or Pliocene Shinzato tuff member near Hiyakuna, **MacNeil, F. S.**

†*Calcar loochooensis* **sp. nov.** p. 33, pl. 16, figs. 16–18; Pliocene, Kadena and Maeta Okinawa, **MacNeil, F. S.**

†*Calliomphalus* (*Calliomphalus*) *nudus* p. 54 pl. 5 f. 32, 33; 5.5 miles N.E. of New Albany, Union County, Mississippi; *C.* (*Planolateralus*) **subgen. nov.** p. 55, s.g. type: *C. argenteus* Wade 1926; *C.* (*P.*) *argenteus spinosus* **subsp. nov.** p. 56, pl. 5, f. 19, 23–25; *C.* (*P.*) *decoris* p. 57, pl. 5, f. 26–28; *C.* (*P.*?) *angustus* p. 58 pl. 5 f. 20–22; all from Coon Creek, McNairy Co. Tennessee; *C.* (*P.*) *conanti* p. 57 pl. 5 f. 12–14, Tippah and Union counties, Mississippi; **spp. nov.** Upper Cretaceous, U.S.A., **Sohl, N. F.**

Calliostoma (*Elmerlinia*) *bullisi* **subgen. & sp. nov.** p. 36, pl. 5, fig. 1; pl. 9, fig. 2; pl. 23; E.S.E. of Cabo Orange, Amapá Brazil, in 38 fathoms; *C.* (*Kombologion*) *rosewateri* **subgen. & sp. nov.** p. 41, pl. 6, fig. 3; pl. 10, fig. 2; pl. 26; 85 miles S.E. of Galeota Point, Trinidad in 150 fathoms; *C.* (*K.*) *oregon* **sp. nov.** p. 42, pl. 2; pl. 6, fig. 2; pl. 27, 70 miles S.E. of Corpus Christi, Texas, in 125 fathoms, *C. jeanneae* **sp. nov.** p. 65, pl. 47, figs. 1–2; Habana Cuba; *C. springeri* **sp. nov.** p. 71, pl. 52, figs. 1–2; off Louisiana in 260 fathoms, **Clench & Turner (1);** "*Calliostoma*" *arestum* Dall 1927 E. of Fernandina, Florida in 440 fathoms; *blakei* Clench & Aguayo 1938 off Argentina in 17 fathoms [probably a *Photinula*]; *cinctellum* Dall 1889 off Habana Cuba in 174 fathoms [probably a *Basilissa*]; *circumcinctum* Dall off Habana, Cuba, in 805 fathoms; *halibrectum* Dall 1927 E. of Brunswick, Georgia in 294 fathoms; *kampsa* Dall 1927 E. of Fernandina, Florida in 440 fathoms; *tittarium* Dall 1927 E. of Fernandina, Florida, in 440 fathoms; *trachystum* Dall 1927 E. of Fernandina, Florida in 440 fathoms; all originally described as *Calliostoma* but not now thought to belong to this genus, **Clench & Turner (1).**

†*Calliostoma* (*Calotropis*) *hataii* **sp. nov.** p. 201, pl. 5, figs. 10–12; Nenokami in Hikokuba, Japan, U. Oligocene, **Kanno, S.;** *C.* (*Pulchrastele*) *ikebei* **sp. nov.** p. 25, pl. 16, figs. 3, 8; Pliocene; *C.* (*Tristicotrochus*) *nahaensis* **sp. nov.** p. 25, pl. 16 figs. 2, 7; Pliocene Okinawa, **MacNeil, F. S.;** *C. negroensis* **sp. nov.** p. 12, pl. 1, fig. 8; Tertiary, Arroyo, Verde, Patagonia, Argentina, **Garcia, E. R. de.**

Cantharidus japonicus gelatinous egg masses, **Habe, T. (2).**

†*Cirsochilus ryukyuensis* **sp. nov.** p. 30, pl. 11, figs. 13–15, Pliocene, Chinen-misaki, Okinawa, **MacNeil, F. S.**

Collonista amakusaensis **sp. nov.** p. 295, fig. 3; type locality: Tomioka, Amakusa Kumamoto Pref., distribution; Yakushima & Tanegashima, **Habe, T. (4).**

Dentistyla subgenus of *Solariella* subgenotype o.d. Woodring 1928 is *Margarita asperrima* Dall and includes *dentifera* Dall and *sericifila* Dall, **Clench & Turner (1).**

Elmerlinia **subgen. nov.** p. 29 of *Calliostoma* q.v. type **sp.** *C. jujubinum* Gmelin, **Clench & Turner (1).**

†*Ethalia subpulchella* **sp. nov.** p. 28, pl. 11, figs. 16–17, Pliocene, Formosa and Okinawa, N. of Highway 8, **MacNeil, F. S.**

Gibbula albida, G. euxinica & G. divaricata, pelagic larvae in the Black Sea, figd., **Chukhchin, V. D. (2).**

†*Gibbula pseudoaraonis* **sp. nov.** pp. 348, 351; pl. XIX, figs. 1, 2, 4, 7, Várpalota Lower Tortonian, Miocene, Hungary, **Strausz, L. (1).**

†Helicocryptinae **subfam. nov.** of Turbinidae, for *Helicocryptus* d'Orbigny 1850, p. I 267, **Cox, in Knight, Cox, Keen, et al.**

Homalopomatinae **subfam. nov.** p.I 270 of Turbinidae, for *Homalopoma* Carpenter 1864, *Anadema* Adams and Adams 1854, *Charisma* Hedley 1915, *Cirsochilus* Cossmann 1888, *Leptocollonia* Powell 1951, *Leptothyra* Pease 1869, *Moelleria* Jeffreys 1865, ? *Rangimata* Marwick 1928, ? *Tipua* Marwick 1943, *Vexinia* Cossmann 1918. **Keen, in Knight, Cox, Keen et al.**

Kombologion **subgen. nov.** of *Calliostoma* p. 37 q.v. genotype, *C. bairdii* Verrill and Smith, **Clench & Turner (1).**

Laetifautor elegans **sp. nov.** p. 294, type-locality: Tomioka, Amakusa, Kumamoto Pref., **Habe, T. (4).**

†*Liotia* (*Liotina*) *gervillei*, Lutetian Spain, figs., **Bataller, J. R. (5).**

†*Liotina* (*Dentarene*) *chinenensis* **sp. nov.** p. 29, pl. 11, figs. 29-31; Pliocene, Chinen-misaki Okinawa, **MacNeil, F. S.**

Lunella smaragda stomach structure and mechanism. **Morton, J. E. (1).**

†*Margarites* (*Atira*) *mirabilis* **sp. nov.** p. 270, pl. 41, figs. 1–3, 5–8; text fig. 1A, B; Lower Greensand (Folkestone Beds) Cretaceous; Coxbridge pit, Farnham, Surrey, **Casey, R. (2).**

†*Mesogena* (Kutassy 1940, nom. nud.) Cox, **gen. nov.** p. I 263 f. 169, 7. Upper Trias, Europe. Stomatellidae, **Cox, in Knight, Cox, Keen et al.**

†*Microdoma gracile* Licharew **sp. nov.** p. 290, pl. 8, figs. 8a, b; Ferghana, Jurassic, genus see p. 87, **Pchelintzev & Korobkov [in Orlov].**

Mirachelus Woodring subgen. of *Solariella* t.o.d. *Calliostoma corbis* Dall, Havana, Cuba, **Clench & Turner (1).**

†*Monilea tungyüpingensis* **sp. nov.** p. 268, pl. 31, figs. 17a-c; Pliocene Tungyüping, Pescadores Islands, Taiwan, **Hayasaka, I. & S.**; *M. haebaruensis* **sp. nov.** p. 27, pl. 11, figs. 1–2; Pliocene, Okinawa N. of Highway 8, **MacNeil, F. S.**

†Nododelphinulidae **fam. nov.** p. I 308 Amberleyacea Wenz, 1938, for *Nododelphinula* Cossmann, *Amphitrochus* Cossmann, *Helicacanthus* Dacqué in Wenz, *Trochacanthus* Dacqué and *Metriomphalus* Cossmann 1916, **Cox, in Knight, Cox, Keen et al.**

†*Palaeotrochus praecursor* zone of the Devonian in New York State, **Sutton, R. G.**

†Petropominae **subfam. nov.** p. I 268, of Turbinidae, for *Petropoma* Gabb, 1877, **Cox, in Knight, Cox, Keen et al.**

†*Phanerolepida rehderi* **sp. nov.** p. 30, pl. 7, figs. 6–8, 11–13; Miocene or Pliocene, Asato Okinawa, **MacNeil, F. S.**

Phasianella pontica pelagic larva in the Black Sea, fig., **Chukchin, V. D. (2)**; *Phasianella* Lamarck 1804 proposed as nominal genus with *Buccinum australe* Gmelin 1791 as the type species, **Cox, L. R. (4).**

Phasianellinae Swainson 1840 proposal to place this family group name on the Official List, **Cox, L. R. (4).**

†*Planolateralus* **subgen. nov.** p.55, of *Calliomphalus* q.v. **Sohl, N. F.**

†*Praestomatia* (Kutassy 1940, nom. nud.) Cox, **gen. nov.** p. I 263 f. 169, 1. Stomatellidae. Trias-Jurassic, Europe, **Cox in Knight, Cox, Keen et al.**

†Proconulinae **subfam. nov.** p. I 247, of Trochidae, for *Diplochilus* Wöhrmann 1894, *Dimorphotectus* Cossmann 1918, ? *Callotrochus* Kutassy 1938, *Eocalliostoma* Haas 1953, ? *Tylotrochus* Koken 1896, *Anticonulus* Cossmann 1918, *Proconulus* Cossmann 1918, *Epulotrochus* Cossmann 1918, *Lithotrochus* Conrad 1855, *Trypanotrochus* Cossmann 1918, *Muricotrochus* Cossmann 1918, *Discotectus* Favre 1913, **Cox, in Knight, Cox, Keen et al.**

†*Protorotella hayashii* **sp. nov.** p. 205, pl. 5, figs. 15–16; Nagura, Ogano-machi Japan, L. Miocene, **Kanno, S.**

Solariella S.V.Wood type by monotypy *S. maculata* S. V. Wood, includes *Trochus* (*Zizyphinus*) *tiara* Watson 1879, **Clench & Turner (1).**

†*Solariella stewarti* **sp. nov.** p. 839, pl. 103, figs. 4, 5; Upper Bald Hills formation Cretaceous, California, **Murphy & Rodda**; "*Solariella*" *albalitus* p. 23, pl. 10, figs. 19–20; Pliocene, White Beach, "S." *shimajiriensis* p. 24, pl. 1, figs. 2–4, Miocene Kakazu **spp. nov.** Okinawa, **MacNeil, F. S.**

†*Tectus yamadensis* **sp. nov.** p. 205, pl. 5, figs. 14a–b; Yamada, Chichibu-city Japan, L. Miocene, **Kanno, S.**

Tegula funebralis strontium, magnesium and aragonite percentages in recent and fossil shells, **Krinsley, D.**

†*Tegula* (*Chlorostoma*) *microstriata* p. 203, pl. 5, figs. 13a–b; Yamada, Chichibu-city, Japan; *T.* (*C.*) *hiranitensis* p. 204, pl. 5, figs. 17–18; Hiranita, Chichibu-city **spp. nov.** Miocene, **Kanno, S.**

†*Teinostoma clara* **sp. nov.** p. 62 pl. 6 f. 2–6 Tallahatchie river valley and tributary, Tippah and Union Co., Mississippi, U.S.A. Upper Cretaceous, **Sohl, N. F.**

†*Tosatrochus* **gen. nov.** p. 26 of Trochinae for *Thalotia aspera* Kuroda (Hirase) Taki 1951, Pliocene, Okinawa, **MacNeil, F. S.**

Trochus anglicus J. Sowerby 1818, *anglicus* interpreted by reference to the neotype designated by L. R. Cox 1955; is placed on the Official List of Specific Names, *T. similis* J. Sowerby 1816, *similis* is suppressed under the Law of Priority and placed on the Official List of Rejected Names, **Opinion 582**; *T. sacellum* first record from Tongyoung, Korea, **Yoo, J. S.**

†*Trochus zardinii* **sp. nov.** p. 25, pl. 2, fig. 16; Cianzopè Prov., Italy, Trias, **Leonardi & Fiscon.**

†*Turbo* (*Marmorostoma*) *tochiyensis* **sp. nov.** p. 206, pl. 6, figs. 13–17; Tochiya Chichibu-city Japan, L. Miocene, **Kanno, S.**

Umbonium costatum and *U. moniliferum* tubercle development in relation to water temperature; significance of spiral lines, **Nagasawa, J. (2).**

†*Umbonium* (*Umbonium*) **sp. nov.** p. 269, pl. 31, figs, 18a–c; Pliocene Tungyüping, Pescadores Islands, Taiwan. **Hayasaka, I. & S.**

†*Yunnania romanovskyi* Licharew **sp. nov.** p. 290, pl. 8, figs. 7a, b; Ferghana, Jurassic; genus see p. 87, **Pchelintzev & Korobkov [in Orlov].**

LOXONEMATACEA

†*Loxonema noe* zone of the Devonian in New York State, **Sutton, R. G.**

†Loxonematacea, systematic descriptions, figures, **Knight, Batten, Yochelson & Cox.**

†Pseudomelaniacea Pchelintzev **super fam. nov.** p. 130, for Pseudomelaniidae, Trajanellidae and Glauconiidae Silurian to Miocene, **Pchelintzev & Korobkov** [in **Orlov**].

†Subulitacea, systematic descriptions and figures, **Knight, Batten, Yochelson & Cox.**

NERITACEA

†*Damesia keownvillensis* **sp. nov.** p. 63, pl. 5 f. 37, 38, pl. 6, f. 40–42 Tippah and Union Co., Mississippi U.S.A., Ripley formation, Cretaceous, **Sohl, N. F.**

Eutrochatella circumlineata from Navassa Island, W. Indies, **Turner, R. D. (2).**

†*Fossariopsis binodosa carinata* **var. nov.** p. 28, pl. 2, figs. 21–22, Costalares, Rumerlo, Bosco Milieres, Alpe di Specie (Prato Piazza) Prov. Trias, Italy, **Leonardi & Fiscon.**

†*Hendersonia occulta* (Say). occurrence as fossil in Mississippi, **Hubricht, L. (2).**

†*Naticopsis* (*Naticopsis*) *suturicompta* **sp. nov.** p. 142, pl. 14, figs. 20–25; Chandler Lake, Nanushuk Lake area, Carboniferous Alaska, **Yochelson & Dutro.**

Nerita oryzarum colouration and habitat, **Mahdihassen, S.**

†*Nerita undata pseudoplicata* **var. nov.** pp. 348, 352; pl. XIX, fig. 3; Várpalota, Hungary, lower Tortonian Miocene, **Strausz, L. (1).**

†*Neritopsis mutabilis* p. 101, pl. IX figs, 10–13; *N. elegans* p. 102, pl. IX figs. 6-8; **spp. nov.** Lias, Higashinagano, W. Japan, **Hayami, I. (3)**; *N. armata cortinensis* p. 32, pl. 3, fig. 12; *N. a. evoluta* p. 33, pl. 3, fig. 23; Costalares; *N. subornata rumerlensis* p. 34, pl. 3, fig. 24; Cianzopè, Pocol, Rumerlo & Costalares Prov., **vars. nov.** Trias, Italy, **Leonardi & Fiscon.**

Puperita (*Heminerita*) *japonica* egg capsule sizes and shapes, **Habe, T. (2).**

Theodoxus fluviatilis influence of salinity and O_2 content of external medium, on respiration, **Bielawski, J.**; *T. fluviatilis* osmotic resistance and osmoregulation, **Neumann, D. (1)**; *T. fluviatilis* experimental study of shell patterns, **Neumann, D. (2)**; *T. fluviatilis* ecological study, **Ulrich & Neumann.**

COCCULINACEA

Cocculina superba **sp. nov.** p. 3, fig'd. p. 2; 800 miles east of Deseado, Argentina at 3,334 fathoms, **Clarke, A. H. (1).**

†*Cocculina loochooensis* **sp. nov.** p. 35, pl. 1, figs. 6, 11, 16; Miocene, Iwa, Okinawa, **MacNeil, F. S.**

CYCLOPHORACEA

†*Ampullina coxi hararina* **form. nov.** p. 77, pl. 10, fig. 3; near Harar, 3½ km. from Diredaua *A. aethiopica* **sp. nov.** p. 80, pl. 10, fig. 7; Monte Guresu, 2220–2280 m. E. Africa, Jurassic, **Jaboli, D.**; *Ampullina* [here placed in Aporrhaidae by authors] *stantoni* p. 843, pl. 101; figs. 9, 10, 11; *A. mona* p. 843, pl. 101; figs. 12, 13; **spp. nov.** Bald Hills formation Cretaceous; California, **Murphy & Rodda.**

Campeloma integrum sinistral shell, **Dexter, R. W.**

Choanopoma (*Choanopomops*) *simplicistoma* **sp. nov.** p. 426, pl. 2, fig. 7; Cerro Chichiriviche Falcon Venezuela; *C.* (*Choanopomops*) *barkeri perijensis* **subsp. nov.** p. 428, pl. 2, fig. 2; Cerro Chimichagua, Magdalena, Colombia, **Solem, A. (2).**

Chondropoma subauriculatum Pfeiffer 1862 suggested by H. B. Baker 1923 as a mis-labelled set of *Chondropoma biforme* Pfeiffer from Turk's Island, Bahamas not Cumana, Venezuela, **Solem, A. (2)**; *C. avassense* from Navassa Island, W. Indies, **Turner, R. D. (2).**

Cipangopaludina malleata relation between nutritive cells and developing spermatids in spermatogenesis, **Yasuzumi, Tanaka & Tezuka.**

Cochlostoma (*Apolloniana*) *susaense* from N. Africa, Spain and Italy, **Sacchi, C.-F. (3).**

Cyclophoracea, systematic description. figures, **Knight Batten, Yochelson & Cox.**

Cyclostoma described by Sowerby 1843 from Demerara, British Guiana, references and current disposition of the names:— *C. suturale* Sowerby 1843, this is the Jamaican *Cyclojamaicia suturalis* (Bartsch 1942); *Cyclostoma discoideum* Sowerby 1843, this is the Javanese *Cyclotus* (*Pseudocyclophorus*) *discoideus* (Bentham Jutting 1948); *Cyclostoma articulatum* Sowerby 1843, this is the Jamaican *Adamsiella variabilis* C.B. Adams (Vendryes 1899); *Cyclostoma thysanoraphe* Sowerby 1843, this is the Jamaican *Colobostylus thysanoraphe* (Vendryes 1899); *Cyclostoma mirabile* Sowerby 1843, this is the Jamaican *Adamsiella mirabilis* (Vendryes 1899); *Cyclostoma chlorostoma* Sowerby 1843, not yet identified with any Jamaican species but probably a mislabelled Jamaican shell. *Cyclostoma bifasciatum* Sowerby 1844 early recognized as related to *Megalomastoma* listed as questionable species by Kobelt 1902 not mentioned by Bartsch and Morrison 1942 almost certainly not a pomatiasid, probably not from Ecuador; *C. thoreyanum* Philippi 1851 not listed by Zischka 1953, similar to *Tudora plicatula* group but validity questioned, *C. aspratile* Morelet 1873 described with *Cylindrella aequatoria*, Tomlin states 1912 that the latter species is the Cuban *Urocoptis* (*Arangia*) *sowerbyana* (Pfeiffer) probably the former is also a Cuban species and the Ecuador record is erroneous, **Solem, A. (2).**

Diplommatina strophosa **sp. nov.** p. 82, pl. 1, fig. 3, Brastagi, Sumatra, **Jutting, W. S. S. v. B.**, Beaufortia 7 (83) 1959. [Omitted from Z.R. 1959].

†*Kosovia pavlovići* p. 373, pl. XXIV, fig. 11; Betuse *K. stevanovići* p. 374, pl. XXIV, fig. 12; Leskovčić Kosovo basin Yugoslavia, **spp. nov.** Pliocene, **Atanacković, M.**

Lanistes ovum and *L. purpureum* not responsible for the spread of bilharziasis in Mozambique, **Morais, T. de.**

Maizania **sp. nov.** p. 222 ; **nom. nud.** Kenya, Marsabit, **Verdcourt, B. (10).**

Palaina floridensis p. 50, pl. 6, fig. 2; *P. clappi* p. 51, pl. 6, fig. 3; *P. megamorpha* p. 52, pl. 6, fig. 1; **spp. nov.** Halavo, Florida Is. Solomon Islands, **Solem, A. (1).**

Paludina vivipara infested by *Diplodiscus*, **Honer, M. R. (2).**

Pila globosa cytoplasmic inclusions of neurones, **Chatterjee, N.**; *P. luzonica* importance of the abundance of these snails to field rats, **Jesus, Z. de**; *P. ovata* not responsible for the spread of bilharziasis in Mozambique, **Morais, T. de**; *P. virens* chemical embryology, **Ramamoorthi, K. (1)**; *P. virens* ribonucleic acid during development, **Ramamoorthi K. (3).**

Plesiropoma bourailensis (Hartman) redescribed and figured 1–3, from New Caledonia, **Solem, A.** (5).

Pomacea of the Amazon River system, **Pain, T.** (2).

Ptychopoma insularis **sp. nov.** p.4, f.1, Pl.1 f.1,2. Bach Long Vi (Nightingale) island, Gulf of Tongking, S. China Sea, **Saurin, E.**

Tudora (*Tudorata*) *woodringi* p. 430 pl. 2, fig. 5; Pijiquay, Bolivar; *T.* (*Tudorata*) *magnifica* p. 431, pl. 2, fig. 4; Nicochi Antioquia **spp. nov.** Colombia, **Solem, A.** (2).

Vivipara vivipara parasitological study of Trematoda, **Chernogorenko, M. I.**; *V. angularis* importance of the abundance of these snails to field rats, **Jesus, Z. de.**

Viviparus viviparus and *V. fasciatus* succinic acid dehydrogenase activity in tissues, **Czapska, M.**; nomenclature of German form, **Forcart, L.** (2); *V. fasciatus* quantitative analysis of NH-positive substances in the foot muscle, **Kiecol & Michejda**; *V. dissimilis* and *V. bengalensis* chromosomes during spermatogenesis, **Ramamoorthi, K.** (2); *V. fasciatus* study of classification of snails from the Vistula, **Stańczykowska, A.** (2); *V. fasciatus* analysis of habitat in the Konfederatke pool, Vistula, **Wojciechowska & Trojan**; *V. viviparus* parasitic atrophy of the gonads, **Zannini, A. M.** (2).

†*Viviparus* (*Viviparus*) *tetracarinatus* p. 372 pl. XXII, figs. 3, 4, 6; Ade, *V.* (*V.*) *petkovići* p. 373, pl. XXIII, figs. 1, 2; Ade, **spp. nov.** Kosovo basin, Yugoslavia Pliocene, **Atanackovič, M.**; *V. aralensis* **sp. nov.** p. 303 Pl. 2 f. 18–21. Western shore of Aral Sea, Kintykche region. Aral beds, Tertiary, U.S.S.R., **Ilyina, A. P.** (1); *V. dezmannianus duabicus* **subsp. nov.** p. 108 Pl. 11 f.5, Cimmerien, Pliocene, To Zhe, Ochamchire region, Abkhazskaya Georgia, U.S.S.R., and biometrical study of the genus, **Taboyakova, V. Y.**

VALVATACEA

Valvata (? *Tropidina*) *fezi* **sp. nov.** p. 14, text-fig. 5; Fuente Roble, Yémeda, Cuenca, Spain, **Altimira, C.**; *V. piscinalis* new addition to the fauna of Marken Island, **Butot, L. J. M.** (2).

†*Valvata cristata* of Quaternary age from the Middle Bug area, Ukraine, **Shovkoplyas, V. N.**

†Valvatidae from the Pleistocene of South Dakota, **Hamill, R.**

LITTORINACEA

†*Lacuna* (*Pseudocirsope*) *teichmülleri* p. 15; pl. 1, fig. 4; Oligocene, Moers/Niederrhein *L.* (*P.*) *dittmeri* p. 16, pl. 1, fig. 5; Miocene Geldern/Niederrhein **spp. nov.** Germany, **Anderson, H.-J.** (2).

†*Lemniscolittorina* **gen. nov.** p. 85, Littorinidae; genotype: *Littorina berryi* Wade, 1926. Tennessee and Mississippi, U.S.A. Cretaceous, **Sohl, N. F.**

Littorina littorea directional movements, **Alexander, D. G.**; *L. littorea* and *L. saxatilis* vertical range and distribution on St. Kilda, **Bagenal, T. B.**; *L. littorea* from the low water mark on Gann Flat, Pembs, **Bassingdale & Clark**; *L. pintado* laboratory rearing and maintenance, **Chu & Ryan**; *L. neritoides* pelagic larva in the Black Sea, fig., **Chukhchin, V. D.** (2); *L. littorea*, *L. saxatilis*, *L. obtusata*, from the littoral fauna of S. Portugal, **Fischer-Piette, E.** (2). *L. saxatilis* variations in estuaries and rias, **Fischer-Piette & Gaillard**; *L. littorea* lethal high temperatures, **Fraenkel, G.**; *L. obtusata* influence of temperature on geotaxis and phototaxis, **Janssen, C. R.**; *L. palliata*, *L. rudis* and *L. littorea*, metabolism in and out of water, **Zieg, R. G.**

†Littorinacea, Tertiary Germany, taxonomic study, **Anderson, H.-J.** (2).

Littorinidae reproductive types, breeding habits and migrations in Japan, **Kojima, Y.**

RISSOACEA

†*Alvania* (*Alvinia*) *pseudopartschi* p.23, pl. 3, fig. 2; Bohrung Süderhastedt, Holstein; *A.* (*Alvania*) *holstatica* p. 26, pl. 3, fig. 4; south of Heide, Holstein; **spp. nov.** Tertiary, Germany, **Anderson, H.-J.** (2); *A. awa* **sp. nov.** p. 109, pl. 10, figs. 1-4; Ochiai, N.W. Honshu Japan Pliocene, **Chinzei, K.** (1); *A.* (*Alvania*) *aglaia hemivenus* **subsp. nov.** p. 91, pl. 1. figs. 3, 3a; Tertiary L. Messiniano, Casi i Gessi Rep. S. Marino, **Moroni, M. A.** (2); *A.* (*Alvania*) *productilis minor* **subsp. nov.** pp. *66*, 134 pl. V, fig. 20; Kuzmice eastern Czechoslovakia, upper Tortonian (Miocene), **Švagrovský, J.**

Assiminea yeshidayukioi **sp. nov., Kuroda** (1) [Z.R. 96 1959, p. 66] should read *A. yoshidayukioi*.

Barleeia trifasciata **sp. nov.** p. 295 typo locality Tomioka, Amakusa Kumamoto Pref. **Habe, T.** (4).

Belgrandiella bumasta **sp. nov.** Peć, Montenegro p. 151 f. 6; **Schütt, H.** (2).

Bithynia (1818), *Bithinia* Gray (1824) and *Bythinia* Macgillivray (1843) are different spellings of one genus. Note on Opinion 475 [Bull. Zool. Nom. **16** 1957] in which Bithyniidae Gray was put on the approved list and a list outlining the familial names which are prior, **Baker, H. B.** (1); *B. tentaculata* new addition to the Marken Island fauna, **Butot, L. J. M.** (2); *B. codiella* development of eggs in fresh water, **Cassarà, A.**; *B. leachi* as the host of *Opisthorchis felineus*, **Duggan, A. J.**; *B. tentaculata* population fluctuation in Poland, **Stańczykowska, A.** (1).

†*Bithynia aralense* **sp. nov.** p. 304 Pl. 2 f. 16–17a. Kintykche region. Western shore of Aral Sea, U.S.S.R. Aral beds, Tertiary, **Ilyina, A. P.** (1); *B.* (?) *parva* **sp. nov.** p. 223 Pl. 1 f. 23. Vikulovsk region, W. Siberia. Lower Cretaceous, **Martinson & Velikzhanina.**

Bythinella lackeineri from the Province of Como, Italy, **Toffoletto, F.**

Bythiospeum quenstedti Wiedersheim, figured, **Bolling, W.**

†*Calipyrgula circumstriata* **sp. nov.** p. 125, pl. 12, figs. 1–3; Pleistocene Pecos River, Terrell County, Texas, **Leonard & Ho** (1); *C. pecosensis* **sp. nov.** p. 110, pl. 11, figs. 1–3; Late Pleistocene Pecos River, Crane County Texas, also fig'd., *C. hibbardi* pl. 11, figs. 4, 5, **Leonard & Ho** (2).

Cincinnatia peracuta one immature specimen from Texas, **Branson, B. A.**

†*Cingula* (*Pseudosetia*) *laevigata hispida* **subsp. nov.** pp. *67*, 135; pl. VI, figs. 1–5; Kuzmice, Kiržaň, E. Czechoslovakia Upper Tortonian (Miocene), **Švagrovský, J.**

†*Cyclostoma* (*Tudorella*) *conicum major* **mut. nov.** p. 57, pl. 9, figs. 8a, b; 9a, b; Caravaca, Sarmatian; *C.* (*T.*) *caravacensis* **sp. nov.** p. 58, pl. 9, figs. 10a, b; Spain, **Jodot, P.**

†*Emmericia viennoti* **sp. nov.** p. 64, Bracana near Grenade, Pontian ; *E. candida magnifica* **var. nov.** p. 64, pl. 10, figs. 1a, b—6a, b; Yesares de Valdeganga, Pliocene, Spain, **Jodot, P.**

†*Fluminicola sanmateoensis* **sp. nov.** p. 1208, text-figs. 1E–1G; Pliocene, San Mateo County California, **Glen, W.** (2).

†*Goergesia* **gen. nov.** p. 17 Truncatellidae Pyrgulinae; genotype *G. terebellum* p. 18, pl. 2, fig. 2; Freden, Oligocene, **Anderson, H.-J. (2).**

Hadziella anti **sp. nov.** p. 75, f. 1, Rab Island, Yugoslavia, **Schütt, H. (3).**

Hydrobia ventrosa in the bottom fauna of the Molochnaya estuary, **Lubyanov, I. P.**; *H. jenkinsi* E. A. Smith in France, list of occurrences with associated species, **Lucas, A.**; *H.* (*Potamopyrgus*) *jenkinsi* new stations in the Mediterranean region, **Mars & Rebecq.**

†*Hydrobia ephraimensis* **sp. nov.** p. 33, pl. 3, figs. 8–9; Ephraim Canyon Wasatch Plateau, Eocene, U. Flagstaff beds, Utah, **La Rocque, A. (1)**; *H. ventrosa* in late Pleistocene deposits at Selsey, Hants, **West & Sparks.**

Hydrobiidae or Truncatellidae? If Thiele's (1929) classification is followed Truncatellidae 1840 is the prior name, but if *Truncatella* is excluded Hydrobiidae 1857 is the legal name of the restricted family unless a " first reviser " subordinated it to Bithyniidae before Fischer 1885 reversed that action, **Baker, H. B. (1).**

Lartetia on the genus, **Bolling, W.**; *L. clessini septentrionalis* **subsp. nov.** p. 78 text fig. 1, **Schütt, H. (1).**

Lithoglyphus naticoidus trematode parasites, **Chernogorenko, M. I.**

Littoridina vianai **sp. nov.** p. 89, f. a, b. La Rioja, Argentina, **Parodiz, J. J. (2).**

Lyrodes doellojuradoi **sp. nov.** p. 25, pl. 3, figs. 6–11; Gualeguaychú River S. E. of Entre Rios province, Argentina, **Parodiz, J. J. (1).**

†*Micromelania striato-costata* **sp. nov.** p. 55, pl. III, figs. 14–16; Oligocene. Akhaltsikhe Georgia, **Kacharava, I. V.**; *M. bicarinata* **sp. nov.** p. 221, Pl. 1 f. 20, Ryavkinsk region, W. Siberia. Lower Cretaceous, **Martinson & Velikzhanina.**

Moitessieria olleri **sp. nov.** p. 9, text-fig. 1; Toll Cave, Moya, Spain, **Altimira, C.**

†*Nematurella pappi* p. 206 pl. 18 f. 4–5; *N. scholli* p. 207 pl. 18 f. 6–7; *N. zoebeleini* p. 208 pl. 18 f. 8; *N. zilchi* p. 209 pl. 19 f. 10–11 *N. schuetti* p. 211 pl. 19 f. 12; **spp. nov.** Miocene Europe, **Schlickum, W. R.**

Oncomelania formosana a new breeding area in S. Taiwan, **Chow, L.-P.**; *O. hupensis, O. formosana* and *O. nosophora* infectivity of *Schistosoma japonicum*, **Hsü & Hsü**; *O. formosana* reproductive anatomy, **Roth, A. A.**; *O. nosophora* Wagner & Chi, and *O. formosana* (Pilsbry & Hirase), on production of eggs, figs., **Roth & Wagner (1)**; *O. nosophora* development of sexual maturity, **Roth & Wagner (2).**

Paladilhia pleurotoma Bgt. figured, **Bolling, W.**; *P.* (*Paladilhiopsis*) *elseri* Fuchs, Germany, fig., **Meier-Brook, C.**

†*Palatinia* **gen. nov. p.** 321, Adeorbidae (?) genotype *P. palatina* p. 321, **sp. nov.** pl. 3, figs. 15–17; Miocene, Hungary Várpalota, **Strausz, L. (2).**

Plagiogeyeria zetaprotogona p. 148, f. 3; *P. zetadidyma* p. 149, f. 4; *P. zetatridyma* p. 150, f. 5; **spp. nov.** Tunjevo, Montenegro, Yugoslavia, **Schütt, H. (2).**

†Pomatiopsidae from the Pleistocene of South Dakota, **Hamill, R.**

Pomatiopsis lapidaria in swamps, N. & S. Carolina, Georgia, *P. praelonga* in dry habitats, West Virginia and *P. hinkleyi* in wet habitats, Alabama, **Hubricht, L. (6).**

Potamopyrgus jenkinsi effect of sewage effluent discharge on deposition of Ca CO_3 on shells, **Edwards & Heywood**; *P. jenkinsi* (E. A. Sm.) Further Scottish records, **Kevan, D. K.**; *P. jenkinsi* in Orkney, **McMillan, N. F. (6).**

Pseudamnicola lagari **sp. nov.** p. 10, text-figs. 2a, 2b; Can Parés, Gava, Barcelona, Spain, **Altimira, C.**; *P. confusa* a general ecological study from the Biesbosch, **Butot, L. J. M. (3)**; *P. confusa* Distribution in the Rhine and Meuse deltas, **Hartog, C. d.**; *Pseudamnicola* of Lake Ohrid, Yugoslavia *P. sturanyi* Polinski, *P. polinskii* **sp. nov.** p. 8, figs., 2 (upper), 3 (lower) inhabits the 3 springs and lake bank, **Radoman, P.**

†*Pseudoliotia motobuensis* **sp. nov.** p. 35, pl. 10, figs. 25–28; Pliocene, Nakoshi sand; Untenko Okinawa; **MacNeil, F. S.**

†*Putilla* (*Ovirissoa*) *gliberti* **sp. nov.** p. 19, pl. 2, fig. 3, Bohrung Winnert near Husum Germany, Tertiary, **Anderson, H.-J. (2).**

Pyrgophorous spinosus collected from Texas, **Branson, B. A.**

Rissoa splendida, R. venusta, fig'd, and *R. euxinica*, pelagic larvae in Black Sea, **Chukhchin, V. D. (2)**; *R. parva* polysaccharides, **Gostan, G.**

†Rissoacea Tertiary, Germany taxonomic study, **Anderson, H.-J. (2).**

Saxurinator **gen. nov.** p. 146 genotype *Paladilhiopsis buresi; S. orthodoxus* p. 147 fig. 1; Tunjevo *S. echlickumi* p. 148, fig. 2; Peć **spp. nov.** Montenegro Yugoslavia, **Schütt, H. (2).**

Tomichia hendrickxi from the Belgian Congo, paratypes in the British Museum, Museum of Comparative Zoology Cambridge and the Venmans collection, **Verdcourt, B. (5).**

Truncatella Caribbean species. *Truncatella pulchella* Pfr. selection of types by Clench and Turner considered invalid, **Torre, A. de la.**

Truncatellidae or Hydrobiidae? [See Hydrobiidae.] **Baker, H. B. (1).**

†*Turboella tallahatchiensis* p. 88 pl. 9 f. 37, 40–43, Mississippi and Georgia; *T. crebricostata* p. 88 pl. 9 f. 32–34, Union Co., Mississippi U.S.A. Cretaceous, Ripley formation, **spp. nov., Sohl, N. F.**

CERITHIACEA

†*Acrocoelum*? *cereum* **sp. nov.** p. 133, pl. 18, f. 23, 24. Union Co., Mississippi U.S.A. Ripley formation, Cretaceous, **Sohl, N. F.**

†*Acutospira* **subgen. nov.** p. 101 of *Colpospira*, subgenotype *Turritella okadai* p. 102 pl. 12, figs. 1–7, 9–18; pl. 15, fig. 8; *C.*(*A.*) *tashiroi* **sp. nov.** p. 103, pl. 13, figs. 1–10; Fukami Eocene, Kyushu; *C.*(*A.*)*yabei* **sp.nov.** p. 104, pl. 13, figs. 11–17; Iojima Oligocene Japan, **Kotaka, T. (1).**

Archimediella torulosa coursini **subsp. nov.** p. 866, pl. II figs. 10, 15; Gorée, Ghana, **Marche-Marchad, I.**

†*Architectonica carocollata* **juv. an n.sp.** p. 60, pl. 1, figs. 8a–b; Tortonian clay-facies; Miocene, Szokolya, Hungary, **Báldi, T.**; *A.* (*Solariaxis*) *nomurai* **sp. nov.** p. 38, pl. 1, figs. 19, 23, 27; Miocene Yonabaru clay member; Iwa Okinawa, **MacNeil, F. S.**

Australaba picta = *Alaba vitrea* egg masses, spawning season and general breeding habits, **Habe, T. (2).**

Batillaria minima laboratory maintenance, **Wagner, A.**

Batillariinae recent and tertiary from Australia, figs., localities and nomenclature, **Cotton, B. C. (16).**

†*Bellatara palaeochroma ornatissima* **var. nov.** p. 220, pl. XXVIII figs. 2a-b-c-d; Mount Postale Venetia; Lutetian Eocene, **Malaroda, R.**

Bitium reticulatum pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2).**

†*Brotia* (*Tinyea*) *obilići* **sp. nov.** p. 374 pl. XXV. fig. 2; Leskovčić, Sibovac and Ade Kosovo basin, Yugoslavia, Pliocene, **Atanackovič, M.**

Caecidae, Catalogue of species described by de Folin, **Kisch, B. S.**

Caecum trachea pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2).**

Ceraphasiinae Gill 1863 proposal that this name be rejected as an incorrect spelling of Ceriphasiinae, **Melville, R. V.**

Ceriphasiinae Gill 1863 proposed suppression under Law of Priority, **Melville, R. V.**

†Cerithiacea Tertiary, Germany, Taxonomic study, **Anderson, H.-J. (2).**

Cerithidea californica morphology, **Bright, D. B.**; *C. californica* carotenoids and chlorophyllic pigments, **Nadakal, A. M.**

Cerithidium submammelatum pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2).**

†*Cerithiella* (*Cerithiella*) *saheloparvula* **sp. nov.** p. 95, pl. 4, fig. 25; Tertiary L. Messiniano, Casa i Gessi, Rep. S. Marino, **Moroni, M. A. (2).**

Cerithiidae of Australia, figs. distribution and nomenclature, **Cotton, B. C. (5).**

Cerithiopsis tubercularis pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2)**; *C. spongicola* **sp. nov.** p. 296, type locality; Tomioka, Amakusa, Kumamoto Pref. distribution: Yura Bay, Wakayama Pref. Isshiki, Aichi Pref. **Habe, T. (4).**

†*Cerithiopsis* (*Alipta*) *premelvilli* **sp. nov.** p. 43, pl, 7, fig. 31; Miocene or Pliocene Shinzato tuff member, Shinzato Okinawa, **MacNeil, F. S.**

Cerithium ponticum pelagic larva in the Black Sea, fig, **Chukhchin, V. D. (2).**

†*Cerithium* (*Tympanotonus*) *meskhethicum* **sp. nov.** p. 58, pl. III, figs. 27–28; *C. subvaricosiforme* **sp. nov.** p. 46, pl. II, fig. 10; Oligocene, Karatubani, Akhaltsikhe Georgia, **Kacharava, I. V.**; *C. zeuschneri letkésensis* **var. nov.** p. 322, pl. 2, figs. 7, 8; Miocene, Hungary Letkés, **Strausz, L. (2)**; *C.* (*Thericium*) *boettgeri* **" nom. nov."** pp. 77, 139; pl. VII, figs. 11, 12; Kostej E. Czechoslovakia, Tortonian (Miocene), **Švagrovský, J.**

Cleopatra africana & *C. amoena* found not to be vectors of bilharziasis in Mozambique, **Morais, T. de.**

†*Climacopoma serratomarginata* **sp. nov.** p. 37, pl. 7, figs. 17, 23, 27; Miocene or Pliocene, Shinzato tuff member Gushichan, Okinawa, **MacNeil, F. S.**

†*Colposigma gairi* **sp. nov.** p. 17, pl. 2, figs. 28, 29; *C. plebeia* **sp. nov.** p. 18, pl. 2, figs. 24, 25; Tertiary Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

†*Colpospira* (*Acutospira*) *okadai* **subgen. nov.** q.v. p. 101 Eocene, Japan, **Kotaka, T. (1).**

†Cryptoplocinae Pchelintzev **subfam. nov.** p. 121; of Nerineidae Zittel 1873 Emend. for *Cryptoplocus* & *Endiaplocus* Bathonian to Turonian, **Pchelintzev & Korobkov [in Orlov].**

†*Cryptoplocus blazinensis* **sp. nov.** p. 40, pl. 10, fig. 4, Astartian, Sainte Croix Mts., Poland, **Karczewski, L.**

Dendropoma marchadi p. 37, pl. 2, figs. 1–3; text-figs. 1–5, 23–25, 33; Gorée Senegal in Lower intertidal zone; *D. tholia* p. 41, pl. 3, figs. 4–6; text-figs. 6–13; 20–22, 33; Inhaca Island off Lorenço Marques, Mozambique; *D. ghanaense* p. 48, pl. 4, figs. 7, 8; text-figs. 14–19, 33; Dixcove 10–15 miles W. of Takoradi, Ghana; **spp. nov., Keen & Morton.**

Diala stricta **sp. nov.** p. 296, fig. 2; type locality: Minamata, Kumamoto Pref., distribution: Tomioka, Amakusa, Kumamoto Pref., Tanabe Bay, Wakayama Pref., & Hamanako Shizuoka Pref., **Habe, T. (4).**

†Diozoptyxisinae Pchelintzev **subfam. nov.** p. 121, of Nerineidae Zittel 1873 emend. for *Diozoptyxis*, *Plesioptygmatis*, *Plesioplocus*, *Laevinerinea* & *Neoptyxis*, Tithonian to Upper Cretaceous, **Pchelintzev & Korobkov [in Orlov].**

†Diptyxisinae Pchelintzev **subfam. nov.** p. 123 of Nerineidae Zittel 1873 emend. for *Diptyxis* & *Oligoptyxis*, Jurassic to Turonian, **Pchelintzev & Korobkov [in Orlov].**

†*Dircella* **gen. nov.** p. 80, Potamididae; genotype: *Turbonilla* (*Chemnitzia*) *spillmani* Conrad 1860; Mississippi & Tennessee, U.S.A., Cretaceous, **Sohl, N. F.**

†*Echinimathilda* **subgen. nov.** of *Mathilda* q.v., **Sohl, N. F.**

† *Gegania bella prodiga* **subsp. nov.** p. 135, pl. 18, fig. 28, 32, 33, Tippah & Union Counties, Mississippi, U.S.A., Ripley formation, Cretaceous, **Sohl, N. F.**

†*Hataiella* **subgen. nov.** p. 88 of *Turritella*, subgenotype *Turritella s-hataii* Ajiri, Miocene, Miyagi Prefecture pl. 9, figs. 1–5; Japan, **Kotaka, T. (1).**

†*Idaella* **subgen. nov.** p. 97 of *Turritella* subgenotype *Turritella tanaguraensis* Tanakura Miocene, Fukushima Prefecture; pl. 8, figs. 1–9; Japan, **Kotaka, T. (1).**

†*Kumania* **subgen. nov.** of *Melanoides*, p. 10, type; *K. kawaguchiensis* **sp. nov.** p. 10, pl. 2, figs. 18–24; text-fig. 5; Kumamoto Prefecture Japan; Kwanmon Group (Inkstone series), Mesozoic, **Ota, Y. (2).**

Lithasia Haldeman 1840 type sp. *Anculosa* (*Lithasia*) *geniculata* Haldeman 1840 proposal to be placed on the Official List and *geniculata* in this form also on the Official List, **Melville, R. V.**

†*Mathilda loochooensis* **sp. nov.**, p. 37, pl. 7, fig. 18; Miocene or Pliocene Shinzato tuff member, Asato Okinawa, **MacNeil, F. S.**; *M.* (*Echinimathilda*) **subgen. nov.** p. 131, subgenotype; *M.* (*E.*) *corona* p. 131, pl. 18, f. 10–12; Owl Creek, Tippoli Co.; *T.* (*E.*) *unionensis*, p. 132, pl. 18, f. 3–9, Tippah and Union Counties; **spp. nov.**, Mississippi, U.S.A., Cretaceous, **Sohl, N. F.**

Melania crenulata chromosomes and sex chromosomes during spermatogenesis, **Jacob, J.**

†*Melania turriformis* p. 220, pl. 1, f. 17–19; Yakovlevsk region, Western Siberia, Lower Cretaceous, **Martinson & Velikzhanina.**

Melaniidae, cytological study with reference to parthenogenesis and polyploidy, **Jacob, J.**

Melanoides lineatus, *M. tuberculatus* and *M. scabra*, oogenesis and maturation of parthenogenetic species; Meiosis in rare males of polyploid *M. tuberculatus* and

M. lineatus; Chromosomes of diploid and polyploid; *M. tuberculatus* and of *M. lineatus* and *M. scabra*, **Jacob, J.**; *M. tuberculata* not responsible for the spread of bilbarziasis in Mozambique, **Morais, T. de.**

†*Melanoides* (*Yoshimonia*) *kokurensis* **sp. nov.** p. 310, pl. XXXVI, figs. 9a, b, 10a, b, 11, 12; text-fig. 3h1, 2; Shingetsu, Kokura City Japan, Mesozoic Sengoku formation, **Hase, A.**; *Melanoides* (*Yoshimonia*) **subgen. nov. q.v., Ota, Y. (2).**

Melanopsis praerosa from Kuri, Azerbaidjan, **Aliev, A. D. (1).**

†*Melanopsis kleini major* **mut. nov.** p. 65, pl. 11, figs. 2a, b–5a, b; Caravaca, Sarmatian; Spain, **Jodot, P.**

†*Mesalia yessoensis* p. 108, pl. 10, figs. 1–4, 7; Piu Miocene, Chikubetsu, *M. akitana* p. 109, pl. 11, fig. 5; Shibikawa Pliocene? Akita Prefecture N.W. of Soto-Warita-mura; **spp. nov.**, Japan, **Kotaka, T. (1).**

†*Nerinea desvoidyi aethiopica* **form. nov.** p. 83, pl. 10, fig. 12; pl. 11, figs. 1, 2a–b; Fortino di Diredaua, E. Africa, Jurassic, **Jaboli, D.**; *N. inkermanica* **sp. nov.**, p. 143, text-fig. 1; Montian, Paleogene, River Kacha, Crimea, **Makarenko, D. E.**

†Nerineinae Pchelintzev **subfam. nov.** p. 120 of Nerineidae Zittel 1873 Emend. for *Nerinea, Endiatrachelus, Melanioptyxis, Fibuloptyxis* and *Cossmannea*, Lias to Cretaceous, **Pchelintzev & Korobkov [in Orlov].**

†Nerinellidae Pchelintzev **fam. nov.** p. 124 of Nerineacea for *Nerinella, Aptyxiella, Polyptyxis, Bactroptyxis, Multiptyxis, Plesioptyxis, Aploxus* and *Triptyxis*, Lias to Senonian, **Pchelintzev & Korobkov [in Orlov].**

†*Nipponocolpus* **subgen. nov.** p. 98, of *Turritella* subgenotype *T. soyoae* **sp. nov.** p. 99, pl. 6, fig. 15; S.S. Soyo-maru Station, Recent and Cenozoic; Japan, **Kotaka, T. (1).**

Paludomus tanschaurica chromosomes and sex chromosomes during spermatogenesis, **Jacob, J.**

Pleuroceridae Fischer 1885, type genus *Pleurocera* Rafinesque 1818, proposal to be placed on Official List; also proposed *Pleurocera* is feminine, **Melville, R. V.**

†*Potamides* (*Pirenella*) *gamlitzensis transdanubicus* **var. nov.**, p. 322, pl. 2, figs. 5, 6; Miocene, Hungary, Várpalota, **Strausz, L. (2).**

Potamidinae recent and tertiary from Australia, figs., localities and nomenclature, **Cotton, B. C. (16).**

†Procerithiidae, systematic descriptions of genera, figures, **Knight, Batten, Yochelson & Cox.**

†*Promathilda* (*Clathrobaculus*) *parvula* **sp. nov.** p. 133 pl. 18, f. 17, 29–31, Hall Creek, Tippah Co., and Tallahatchie river valley, Union Co., Mississippi, U.S.A., Ripley formation, Cretaceous, **Sohl, N. F.**

†*Promathildia* (?) *peracuta elongata* **var. nov.** p. 86, pl. 9, figs. 14–15, 20; Costalares and Rumerlo Prov., Italy Trias, **Leonardi & Fiscon.**

Protoma (*Protomella*) *praetermissa* **comb. nov.** p. 872, pl. II fig. 14; Bay of Mossamedes, Africa, **Marche-Marchad, I.**

†*Pseudomalaxis* ? *stantoni* **sp. nov.** p. 67, pl. 6, f. 29, 39, 43, 44, Tippah and Union Counties, Mississippi, U.S.A., Cretaceous, **Sohl, N. F.**

†Ptygmatisinae Pchelintzev **subfam. nov.** p. 121 of Nerineidae Zittel emend. 1873; for *Ptygmatis*, ? *Teleoptyxis, Aphanoptyxis*, Bathonian to Aptian, **Pchelintzev & Korobkov [in Orlov].**

Semisulcospira bensoni (Philippi), anatomy 3 pls. of 33 figs., **Itagaki, H.**

†*Semisulcospira fiscina yokoyamai* Suzuki, lectotype designated p. 42, **Oyama, Mizuno & Sakamoto.**

†*Shoshiroia* **subgen. nov.** of *Vicarya*, p. 291; *V.* (*S.*) *yabei* **sp. nov.** p. 292, pl. 30, figs. 4, 5; Middle Eocene, Nagasaki Prefecture, Kyushu, Japan, **Kamada, Y.**

†*Solarium soproniense* **sp. nov.** pp. 349, 353, pl. XX, figs. 1, 3, 4; Sopron, *Solarium simplex szobiensis* **var. nov.** pp. 349, 353; pl. XIX, figs. 4, 5; Szob, Hungary, Tortonian, Miocene, **Strausz, L. (1).**

Strepomatidae Haldeman 1863 proposed rejection, not based on available generic name, **Melville, R. V.**

Trifora perversa pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2).**

Turritella (*Haustator*) *tricarinata* phylogeny in Britain and the Mediterranean, **Kotaka, T. (2).**

†*Turritella tricarinata* common in the Coralline Crag of Suffolk, **Baden-Powell, D. F. W.**; *T.* (*Haustator*) *elegantula* p. 210 pl. 6, figs. 5–9; Hashizume, Minanomachi; *T. mitagawensis*, p. 211, pl. 6, fig. 10; Oganomachi **spp. nov.** Oligocene, Japan, **Kanno, S.**; *T.* (*Neohaustator*) *saishuensis* phylogenetic trend in Japan, **Kotaka, T. (2)**; *T.* (*Neohaustator*) *fortilirata chikubetsuensis* **subsp. nov.** p. 73, pl. 10, figs. 18–21; Takinoue, Miocene; *T.* (*Hataiella*) *s-hataii* **subgen. nov.** q.v. p. 88, Ajiri, Miocene; *T.* (*Idaella*) *tanaguraensis* **subgen. nov.** q.v. p. 97, Tanakura Miocene; *T.* (*Nipponocolpus*) *soyoae* **subgen.** and **sp. nov.** p. 98, q.v. S.S. Soyo-maru Station Recent, Japan, **Kotaka, T. (1)**; *T. zinboi* **sp. nov.** p. 36, pl. 11, fig. 27; Pliocene Chinen sand, White Beach, Okinawa, **MacNeil, F. S.**; *T.* (*Turritella*) *clarae* **sp. nov.** p. 99, pl. 2, fig. 13; Tertiary L. Messiniano, Casa i Gessi, Rep. S. Marino, **Moroni, M. A. (2)**; *T. hilgardi* p. 76, pl. 8, f. 5, 6, 10, Tippah & Union Co., Mississippi, Texas; *T. chalybeatensis* p. 76, pl. 7, f. 24–26, Tippah Co. Mississippi; **spp. nov.**, U.S.A., Cretaceous, **Sohl, N. F.**

Turritellidae, systematic descriptions, figures, **Knight, Batten, Yochelson & Cox.**

Vermetidae and marine intertidal zonation, **Keen, A. M. (4).**

†*Vicarya* (*Shoshiroia*) **subgen. nov.** q.v., **Kamada, Y.**

†*Vicaryella jobanica* **sp. nov.** p. 293, pl. 31, figs. 12, 13; Early Miocene, Ibaragi Prefecture, Kyushu, Japan, **Kamada, Y.**

†*Yoshiomonia* **subgen. nov.** p. 7 of *Melanoides*, subgenotype *T. yoshimoensis* **sp. nov.**, p. 7, pl. 2, figs. 12–15, text-fig. 3; Yoshimo, Yamaguchi Pref., *Y. katsukiensis* **sp. nov.** p. 9, pl. 2, figs. 16–17, text-fig. 4; Yahata City, Fukuoka Pref., Japan, Mesozoic, **Ota, Y. (2).**

†*Zeacolpus* (*Stiracolpus*) *kaawaensis* phylogenetic trend in New Zealand, **Kotaka, T. (2)**; *Zeacolpus* **sp. nov.** p. 18, pl. 2, fig. 26, Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

Zemelanopsis trifasciata gut functions and style mechanism. **Morton, J. E. (1).**

CALYPTRAEACEA

Calyptraea chinensis from the low water mark on Gann Flat, Pembs., **Bassindale & Clark**; *C. sinensis* atypic spermiogenesis, **Streiff, W. (1)**; *C. sinensis* biology of breeding habits, **Streiff, W. (2)**; *C. sinensis* chromosome structure in spermatocytes, **Streiff, W. (3)**; *C. chinensis* response to light of post veliger larvae, **Wyatt, H. V. (1)**; *C. chinensis* protandry and self fertilization, **Wyatt, H. V. (2).**

†*Calyptraea striata* **sp. nov.** p. 212, pl. 6, figs. 18–19; Arakawa-mura Japan, Miocene, **Kanno, S.**

†Calyptraeidae from New Zealand, fossil history, **Boshier, D. P.**

†*Capulus monroei* **sp. nov.** p. 93, pl. 10 f. 8, 9. Coon Creek, McNairy Co., Tennessee, U.S.A., Ripley formation, Cretaceous, **Sohl, N. F.**

Crepidula fornicata found during an intertidal ecology study of Kenmare River, Ireland, **Arnold, D. C.**; *C. fornicata* pH value of the stomach, **Morton, J. E. (1)**; *C. fornicata* protandry and self fertilization, **Wyatt, H. V. (2).**

Hipponix antiquatus habits and presence of males in the population, **Yonge, C. M. (3).**

†*Trichotropis mississippiensis* **sp. nov.** p. 89, Pl. 10, f. 22, Union County, Mississippi, U.S.A. Ripley formation, Cretaceous, **Sohl, N. F.**

STROMBACEA

Aporrhais serresianus a common mollusc at 600 metres down off Algeria, **Dieuzeide, R.**

†*Arrhoges* (*Latiala*) **subgen. nov.** p. 101, subgenotype: *Anchura lobata* Wade, 1926, Ripley formation, Mississippi and Nacatoch Sand, Texas, Cretaceous, U.S.A., **Sohl, N. F.**

†*Euspira popenoei* p. 844, pl. 101, figs. 21, 22, 23; *E. marianus* p. 844, pl. 101, figs. 24, 25, 26; **spp. nov.** Bald Hills formation, Cretaceous; California, **Murphy & Rodda.**

†*Graciliala* **gen. nov.** p. 97, Aporrhaidae, Genotype: *Anchura* (*Drepanochilus*) *calcaris* Wade, 1926 Ripley formation, Cretaceous, Tennessee, U.S.A. To include also, *Anchura decemliratus* Conrad, *A. johnsoni* Stephenson, *A.? campbelli* Steph., *A.? caddoensis* Steph. (= *A. calcaris* Wade) and *A. solitaria* Whitfield, **Sohl, N. F.**

†*Gyrodes allisoni* p. 842, pl. 101, figs. 18, 19, 20; Gas Point road; *G. greeni* p. 843, pl. 101, figs. 27, 28, 29; Cottonwood Creek; **spp. nov.** Bald Hills formation Cretaceous, California, **Murphy & Rodda.**

Lambis sp, a prey of *Conus marmoreus*, **Frost, R. M.**

†*Monalaria gracilis filata* **subsp. nov.** p. 20, pl. 2, figs. 37–40, Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

†*Perissodonta mortoni* **sp. nov.** p. 21, pl. 2, figs. 35, 36; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

†*Pterocerella pontotocensis* **sp. nov.** p. 110, pl. 13, f.4, 12. Pontotoc and Chickasaw counties, Mississippi, U.S.A. Prairie Bluff chalk, Cretaceous, **Sohl, N. F.**

Strombidae, review of Australian genera, **Cotton, B. C. (6).**

Strombus urceus orrae **subsp. nov.** p. 66, pl. 20, fig. 28; pl. 41, fig. 5; Augustus Is. W. Australia; *S. klineorum* **sp. nov.** p. 70, pl. 20, figs. 20, 21; Trincomalee Ceylon; *S. mutabilis ochroglottis* **subsp. nov.** p. 74, pl. 20, figs. 9, 10; Mauritius; *S. terebellatus afrobellatus* **subsp. nov.** p. 88, pl. 61, fig. 2; Pange Is. Zanzibar; *S. vomer iredalei* Abbott 1960 **nom. nov.** pro *S. australis* Gray 1826 (preoccupied Schröter 1805) and Sowerby 1842, p. 133, pl. 14, figs. 11, 12; Indo-Pacific Broome (Australia), **Abbott, R. T. (5)**; *S. maculatus* and allied spp. in Hawaii, **Anon (17)**; *S. ostergaardi* Nuttall, taxonomic status; *S. maculatus*, also described, **Ostergaard, J. M. (1)**; *S. ostergaardi* distribution, **Ostergaard, J. M. (2)**; *S. taurus* Reeve in the Rongelap District, Hawaii, **Willis, R. C.**

Struthiolaria papulosa gut functions and sorting areas of the stomach, **Morton, J. E. (1).**

Struthiolariidae classification discussed, **Marwick, J. (2).**

†*Tessarolax trinalis* **sp. nov.** p. 842; pl. 103, figs. 1, 2, 3; Bald Hills formation, Cretaceous, California, **Murphy & Rodda.**

†*Tylospira* (*Singletonaria*) *gilli* **sp. nov.** p. 41, f. 1a, b. Pliocene, Flinders Island, Tasmania, **Marwick, J. (2).**

ATLANTIDACEA

Atlanta peroni from the Benguela current, **Hart & Currie.**

†*Atlanta korobkovi* **sp. nov.** p. 92, text-figs. 1–3; Miocene (Tortonian), Chernovitsk region, Ukraine, **Ghoretzkii & Burova.**

Carinaria mediterranea from Torremolinos (Málaga), **Alvarado, R.**

Heteropoda as food of the fish genera *Thunnus* and *Alepisaurus*, **Russell, H. D.**

Pterotrachea coronata from Elba and Corsica, **Furnestin, M.-L.**; *P. coronata* male from South African waters, **Okutani & Habe.**

NATICACEA

†*Amauropsis sanctae crucis conica* p. 44, pl. 4, fig. 22; *A.s.c. ptychostomoides* p. 45, pl. 4, figs. 23a–23b; Pocol, Rumerlo; **vars. nov.** *A.* (?) *dolasillae* **sp. nov.** p. 45, pl. 4, fig. 24; Costalares Prov., Trias, Italy, **Leonardi & Fiscon.**

†*Natica* (*Amauropsella*) *elegans* **sp. nov.** p. 44, pl. I, fig. 33; pl. II, figs. 1, 2; Oligocene, Mezhdu, Akhaltsikhe Georgia, **Kacharava, I. V.**; *N.* (*Tectonatica*) *ezoana* **sp. nov.** p. 43, pl. 4; figs. 12, 13; Chikubetsu River, Hokkaido, Japan, Chikubetsu formation, Miocene, **Kanno & Matsuno**; *N.* (*Lunatia* ?) *szobiensis* **sp. nov.** p. 324, pl. 3, figs. 18–22 Miocene Szob, Hungary, **Strausz, L. (2).**

†Naticacea, revision of Tertiary German genera and species, **Anderson, H.-J. (1).**

Naticidae of Australian waters, figs. nomenclature and localities, **Cotton, B. C. (8).**

Neverita (*Glossaulax*) *reiniana* first record from Techun, Korea, **Yoo, J. S.**

Nux **gen. nov.** fam? (Rhachiglossa) genotype. *N. alabaster* **sp. nov.** Naticoid in appearance, S. Africa **Barnard, K. H. (3)**; 439, 440, f. 2.

†*Pachycrommium japonicum* **sp. nov.** p. 213, pl. 7, figs. 1–2; Tochiya, Chichibu-city, Japan, Miocene, **Kanno, S.**

†*Pictavia toyorana* **sp. nov.** p. 104, pl. IX, figs. 1–3, Lias, Higashinagano, W. Japan, **Hayami, I. (3).**

†*Polinices* (?) *mangyschlakensis* **sp. nov.** p. 283, Pl. 3, f. 9–10a, Tyub-Karagan, Manghyshlak, Kazakhstan, Lower Oligocene, **Ilvina, A. P. (3)**; *P. didymoides* **sp. nov.** p. 43, pl. 5; figs. 7a–b; Chipotsunai River, Hokkaido, Japan, Sankebetsu formation, Miocene, **Kanno & Matsuno**; *P. otaioensis* **sp. nov.** p. 19, pl. 2, fig. 30; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1)**; *P. kummeli* **sp. nov.** p. 121, pl. 17, f., 1–4, 8, 9. Hardeman Co. Tennessee and Tippah Co. Mississippi, U.S.A. Cretaceous, **Sohl, N. F.**

†*Ptychostoma pleurotomoides laubei* p. 46, pl. 4, fig. 30; Pocol, Rumerlo; *P. p. supranodosum* p. 46, pl. 4, fig. 27; pl. 5, fig. 1; *P. p. binodosum* p. 46, pl. 5, fig. 2; Costalares Pocol, Rumerlo; *P. wähneri kittli* p. 47, pl. 5, fig. 5; Costalares Prov., **vars. nov.** Trias, Italy, **Leonardi & Fiscon.**

†*Sigaretotrema insociale* **sp. nov.** p. 20 pl. 2, figs. 31, 32; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

†*Taniella tantilla* **sp. nov.** p. 19, pl. 2, figs. 33, 34; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

LAMELLARIACEA

†*Dolichupis* (*Trivellona*) *shimajiriensis* **sp. nov.** p. 49, pl. 2, figs. 10, 13–15; Miocene Yonabaru clay member, Majikin Okinawa, **MacNeil, F. S.**

Trivia (*Pusula*) *elsiae* **sp. nov.** p. 41, pl. 7, f. 1–4; Punta Final, Baja California, **Howard & Sphon, jr.**; *T. arctica* and *T. monacha* sulphate ions in acid secretion, **Thompson, T. E. (1).**

CYPRAEACEA

Cypraea list of Indo-Pacific and Hawaiian species, **Anon (14)**; *C. granulata* ? endemic in Hawaii, **Anon, (15)**; *Cypraea*, new locality records, Marianna Islands, **Anon, (19)**; *C. aurantia*, a register, **Anon (27)**; *C. ostergaardi alleni* on its status, **Burgess, C. M. (1)**; *C. semiplota* endemic in Hawaii, **Burgess, C. M. (2)**; *C. saulae siasiensis* **subsp. nov.** p. 36, pl. 5, figs. 2–6; Punnungan Island near Siasi, Tapul group Sulu Archipelago, **Cate, C. N. (1)**; *C. cernica marielae* **subsp. nov.** pp. 3, *4*, pl. 1, figs. 1, 1a, 2, 2a,; off Maui Hawaiian Islands, also figured *C. cernica cernica; C. c. tomlini; C. c. ogasawarensis*, **Cate, C. N. (2)**; *C. leucodon* pl. 2, a general note and measurements, **Clench, W. J. (1)**; *C. broderipi* Sow. occurrence in South African waters, **Dance, S. P. (1)**; *Cypraea*—remarks on *C. caputserpentis., C. caputdraconis; C. bistrinotata; C. globulus; C. macandrewi; C. xanthodon; C. arabica; C. eglantina and C. grayana;* pls. I, II; [**Griffiths, R. J.**] **(2)**; *C. caputserpentis* functional morphology and relationships within the Cypraeacea, **Kay, A.**; *C. isabella mexicana* first record from Gulf of Mexico, **Keen, A. M. (1)**; *C. alleni ostergaardi* ? on its status, **Gage, W.**; *C. pantherina* zoogeographical distribution problem, **Schilder, F. A. (4)**; *C. ostergaardi* its status as a species, **Summers, R.**

Cypraeidae distorted cowries in the S. Australian Museum collection, **Cotton, B. C. (18)**; Cypraeidae of Mauritius, revised and listed alphabetically, **Schilder, F. A. (3).**

Erosaria guttata azumai **subsp. nov.** Japan, p. 189, pl. 15, f. 4, **Schilder, F. A. (1).**

†*Gisortia harrisi* **sp. nov.** p. 71, pl. 9, figs. 1–3; Upper Eocene, Ocala group, Crystal River formation, Florida, **Palmer, K. V. W. (2).**

Monetaria annulus and *M. moneta* radula and shell, **Schilder, F. A. & M.**

Purpuradusta raysummersi **sp. nov.** Siasi Island, 190 pl. 15, f. 5, and notes on certain species of the Cypraeidae, **Schilder, F. A. (1).**

†*Talparia* (*Arestorides*) *nahaensis* **sp. nov.** p. 49, pl. 17, figs. 3, 7; Pliocene, Naha limestone between Masuya and Maeta, Okinawa, **MacNeil, F. S.**

Zoila thersites having spawned in a Queen Scallop valve found in S. Australia, **Trenberth, W. P.**

TONNACEA

Cassididae of Australia, figs., nomenclature descriptions and localities, **Cotton, B. C. (7).**

Cymatium (*Monoplex*) *echo* Kuroda and Habe, on the egg cluster and capsules, figs., **Arakawa, K. Y. (4).**

†*Cymatium* (*Cabestana*) *doderleini altavillense* **subsp. nov.** p. 11, pl. 2, figs., 9a, 9b; Pliocene, Italy, **Ruggieri, Bruno & Curti.**

†*Galeodea trituberculoides* **sp. nov.** p. 214, pl. 6, fig. 20; Nenokami in Hikokubo, Japan, U. Oligocene, **Kanno, S.**

Gyrina gigantea (Lmk.) in New Zealand waters, **Dance & Dell.**

Morio (*Cassidaria*) *rugosa* at 600 metres off Castiglione, **Dieuzeide, R.**

Phalium strigatum first record from Techun, Korea, **Yoo, J. S.**

†*Plesiotriton cretaceus* **sp. nov.** p. 128, pl. 18, f. 35, 41, 42. Hall Creek, S.W. of Dumas, Mississippi, Cretaceous, **Sohl, N. F.**

†*Priscoficus allani* **sp. nov.** p. 22, pl. 2, figs. 43, 44; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

Thalassocyon **gen. nov.** of Cymatiidae, genotype *T. bonus* **sp. nov.** S. Africa, 440, fig. 3. **Barnard, K. H. (3).**

†*Tintorium* **gen. nov.** p. 128, Cymatiidae, genotype: *T. pagodiforme* **sp. nov.** p. 129, pl. 18, f. 1, 2. Coon Creek, McNairy Co., Tennessee, U.S.A. Ripley formation, Cretaceous, **Sohl, N. F.**

Xenogalea wilsoni **sp. nov.** [p.1] fig. 16; Great Australian Bight near Eucla, 100 fathoms *X. halli* **sp. nov.** [p.1] fig. 15; Victor Harbour off West Island, 15–16 fathoms, **Cotton, B. C. (7).**

EPITONIACEA

†*Epitonium* (*Crisposcala*) *okinavensis* p. 44, pl. 2, fig. 5; pl. 11, figs. 18, 20; Miocene Iwa; *E.* (*Glabriscala*) *submaculosum* p. 45, pl. 16, fig. 31; Pliocene, Kujabaru **spp. nov.** Okinawa, **MacNeil, F. S.**

Ianthina ianthina and *I. globosa* from the surface layers of the Benguela current, **Hart & Currie.**

Janthina janthina composition of gases from the float, **Oppenheimer & McFarland.**

Scalidae of Australia, nomenclature figs. distribution, **Cotton, B. C. (12).**

†*Turriscala* (*Claviscala*) *shimajiriensis* **sp. nov.** p. 43, pl. 2, fig. 3; Miocene Yonabaru clay member, Iwa Okinawa, **MacNeil, F. S.**

PYRAMIDELLACEA

†*Anoptychia canalifera rectelineata* p. 52, **var. nov.** pl. 7, figs. 8–11, 24; Costalares Prov., Trias, Italy, **Leonardi & Fiscon.**

Chemnitzidae, catalogue of species described by de Folin, **Kisch, B. S.**

†*Chrysallida pygmaea palatina* p. 323, pl. 3, fig. 9; *C. intermixta pseudoflexicosta* p. 323, pl. 3, figs. 10–11; **vars. nov.**; *C. pseudovindobonensis* **sp. nov.** p. 323, pl. 3, fig. 12; Miocene, Hungary, Várpalota, **Strausz, L. (2).**

Eulimella acicula and *E. pointeli*, pelagic larvae in the Black Sea, figs., **Chukhchin, V. D. (2).**

†*Katosira seelandica paucispirata* **var. nov.** p. 63, pl. 6, fig. 30; pl. 7, fig. 1; Costalares Prov., Trias, Italy, **Leonardi & Fiscon.**

†*Menestho iwatensis* p. 121, pl. 10, figs. 21, 22; *M. nomurai* p. 121, pl. 10, figs. 9, 10; **spp. nov.** Ochiai N. E. Honshu, Japan, Pliocene, **Chinzei, K. (1).**

Mucronalia ezilis egg capsules and spawning in Japan, **Habe, T. (2).**

Odostomia acuta pelagic larva in the Black Sea, fig., **Chukhchin, V. D.** (2); *O. dipsycha* ontogeny, **Fischer, P.-H.** (1).

Parthenia emaciata and *P. costulata* pelagic larvae in the Black Sea, figs., **Chukhchin, V. D.** (2).

†*Protorcula subpunctata monocarinata* **var. nov.** p. 74, pl. 8, fig. 31; Costalares Prov., Trias, Italy, **Leonardi & Fiscon.**

Turbonilla sp. pelagic larva in the Black Sea, fig., **Chukhchin, V. D.** (2).

†*Undularia* (*Toxoconcha*?) *soreghinae* **sp. nov.** p. 80, pl. 8, fig. 32; Costalares Prov., Trias, Italy, **Leonardi & Fiscon.**

MURICACEA

Centrifuga inezana from the Pacific, **Emerson, W. K.** (4).

Ceratostoma roriflluum spawning, egg capsule studies, **Habe, T.** (2); *C. fournieri* first record from Bangaujin, Kyung-nam, Korea, **Yoo, J. S.**

†*Coralliophila* (*Hirtomurex*) *iwaensis* p. 64, pl. 3, fig. 8; Upper Miocene, Yonabaru clay member, Iwa; *C.* (*Fusomurex*) *shimajiriensis* p. 65, pl. 3, figs. 6, 12; Miocene or Pliocene, Gushichan; Okinawa **spp. nov., MacNeil, F. S.**

Drupa margariticola first record from Tumby Bay, South Australia, **Cotton, B. C.** (2).

Drupinae of the Eastern Pacific, **Hertlein, L. G.** (1).

Ergalatax constractus and *E. calcareus* egg capsules and their deposition, **Habe, T.** (2).

Eupleura caudata varices and growth ridges on shells, **MacKenzie, C. L., Jr.**

Homalocantha on this subgen. of *Murex*, review and history, **Anon,** (22); *Homalocantha* Mörch notes on the subgenus and a new subspecies, see *Murex*, **Burch, J. Q. & R. L.** (1).

Murex (*Homalocantha*) *anatomica zamboi* **subsp. nov.** p. 7, fig'd p. 1, Baring Point, Olango Island, Cebu, Philippine Islands, **Burch, J. Q. & R. L.** (1); *M. trunculus* histochemical study of atypical spermatozoa, **Dupouy, J.** (1); *M. centrifuga* from the Pacific, **Emerson, W. K.** (4).

†*Murex penghuensis* **sp. nov.** p. 272, pl. 31, figs. 19a–c; Pliocene Tungyüping, Pescadores Islands, Taiwan, **Hayasaka, I. & S.**; *M. saplisi* **sp. nov.** p. 63, pl. 8, figs. 14–15; pl. 13, fig. 13; Miocene or Pliocene, Shinzato tuff member; Okinawa, **MacNeil, F. S.**; *M. sabinola* Palmer **nom. nov.** for *M. veatchi* Palmer 1937, Middle Eocene, Texas, **Palmer, K. V. W.** (1).

Muricidae of Australia figs. nomenclature, distribution, **Cotton, B. C.** (11); Muricidae shell structure and crystallography, **Petitjean, M.**

Ocenebra corallina ontogeny, **Fischer, P.-H.** (1); *O. lurida* spawning and egg capsule structure, **Habe, T.** (2).

Phyllonotus peratus **sp. nov.** p. 105, pl. 10, fig. 6; S.E. of Judas Point, Costa Rica *P. peratus decoris* **subsp. nov.** p. 107, pl. 10, figs. 4, 5, 7; West Mexican coast near the Guatemalan border, **Keen, A. M.** (2).

Polyplex purpurascens Perry = *Murex trunculus* Linnaeus here designated as the type of *Polyplex*, **Baily, J. L.**

Purpura haemastoma study of the ontogeny, **Fischer, P.-H.** (1); *P. lapillus* from the littoral zone in Southern Portugal, **Fischer-Piette, E.** (2).

†*Purpura* (*Stramonita*) *haemotoma* [sic] *consul* from Valencia Spain, Quaternary, 1 pl. 2 figs., **Bataller, J. R.** (2).

Rapana bezoar pelagic larva in the Black Sea, fig., **Chukhchin, V. D.** (2); *R. bezoar* discovered on the Turkish coast of the Black Sea, **Fischer-Piette, E.** (1); *R. bezoar* egg capsules and spawning season, **Habe, T.** (2).

†*Rapana thomasiana* variation in the Pleistocene of the Bosô Peninsula, **Nagasawa, J.** (3).

Thais established 1947 by Clench in Johnsonia **2** (23): 86–89 as the proper generic name for *lapillus;* attention drawn to this article in an attempt to end the *Purpura—Nucella—Thais* confusion, **Dexter & B[aker]**; *T. haemastoma floridana* range extension into Chincoteague Bay, **Sieling, F. W.**

†*Thais* (*Polytropa*) *lapillus lapillus* in the Pleistocene of Sicily and evidence for past and present distribution and spread, **Malatesta, A.** (1).

†*Tritonalia* (*Tritonalia*) *inflexa dallonii* **subsp. nov.** p. 107, pl. 7, figs. 40—42; Tertiary, L. Messiniano, Casa i Gessi, Rep. S. Marino, **Moroni, M. A.** (2); *T.* (*Hadriania*) *brocchii delicatula* **subsp. nov.** p. 36, pl. 7, figs. 40a, 40b; Pliocene, Altavilla Italy, **Ruggieri, Bruno & Curti.**

Urosalpinx cinerea correlation between numbers attracted to prey and oxygen consumption rates of prey, **Blake, J. W.**; *U. cinereus* predator on *Aequipecten* in the Niantic River, **Marshall, N.**

BUCCINACEA

Anachis brasiliana from Ubatuba, containing a polyclad worm in the mantle cavity, **Smith, E. H.**

†*Anachis* (*Costoanachis*) *leroyi* p. 67, pl. 13, fig. 11; Pliocene, Chinen sand, White Beach, *A.* (*C.*) *chinenensis* p. 68, pl. 14, fig. 4; Chinen-misaki **spp. nov.** Okinawa, **MacNeil, F. S.**

†*Ancistrolepis striatus* **sp. nov.** p. 216, pl. 6, fig. 21; R. Akahira, Tomita, Japan, Oligocene, **Kanno, S.**

†*Aptyzis okinawa* **sp. nov.** p. 84, pl. 4, figs. 5, 9; Miocene, Yonabaru clay member, Iwa, Okinawa, **MacNeil, F. S.**

Buccinidae of Australia, figs. localities and nomenclature, **Cotton, B. C.** (13).

Buccinum australe proposal to place *australe* Gmelin 1791 in the above binomen on the Official List, **Cox, L. R.** (4); *B. undatum* ontogenic study, **Fischer, P.-H.** (1).

Bullia laevissima function of the osphradium, **Brown & Noble**; *B. digitalis* "water rigour" as an aid for operating on marine gastropods, **Krijgsman & Brown.**

Busycon canaliculatum plasmalogen structure, **Rapport & Alonzo.**

Cantharus from Ubatuba found to contain a polyclad worm in the mantle cavity, **Smith, E. H.**

†*Cantharus okinawa* **sp. nov.** p. 77, pl. 8, figs. 20–21; Miocene or Pliocene, Shinzato tuff member, Okinawa, **MacNeil, F. S.**

Charitodoron Tomlin, previously placed in Buccinidae, now transferred to Mitridae, **Barnard, K. H.** (2).

Colus hunkinsi **sp. nov.** p. 3, pl. 1, fig. 9; Station Alpha, North of Point Barrow, Alaska, **Clarke, A. H.** (3).

†*Cominella* (*Cominula*) *okinavensis* **sp. nov.** p. 75, pl. 8, figs. 18, 24; Miocene or Pliocene, Shinzato tuff member, Asato Okinawa, **MacNeil, F. S.**

†*Coraeophos meisensis ninohensis* **subsp. nov.** p. 114, pl. 9, figs. 18–22; Ochiai N.E. Honshu, Japan, Pliocene, **Chinzei, K.** (1).

Cyclope neritea, Basque coast of France, food and feeding, general habits and burrowing, anatomy of style sac and stomach, **Morton, J. E.** (2).

†*Cyrtulus spiniferus seguenzianus* **subsp. nov.** p. 65, pl. 15, figs., 90a, 90b; pl. 15, fig. 91; Pliocene, Altavilla, Italy, **Ruggieri, Bruno & Curti.**

Fasciolariidae of Australia, figs., nomenclature and localities, **Cotton, B. C.** (14).

†*Fulgur subspinosus* Pchelintzev **sp. nov.** p. 322, pl. 24, figs. 17a, b; Cretaceous, Asia, genus see p. 223, **Pchelintzev & Korobkov** [in Orlov].

†*Fusinus panormitanus* **sp. nov.** p. 74, pl. 16, figs. 93a, 93b, 98a, 98b; *F. p. hemiglabrus* **subsp. nov.** p. 76, pl. 16, figs. 97a, 97b; *F. p. doderleini* **subsp. nov. p.** 76, pl. 15, figs. 89a, 89b; Pliocene, Altavilla, Italy, **Ruggieri, Bruno & Curti.**

Fusus ferrugineus Kuroda & Habe new name for *Fusus minor* (Dunker) [detailed description to be given in " Shell-bearing Mollusks of Mutsu Bay " by Yamamoto and Habe], **Habe, T.** (2).

†*Fusus prevosti szobiensis* **var. nov.** pp. 350, 353; [= *Fusus* **sp. nov.** ? Csepreghy-Meznerics Földt. Int. Évk. **45** p. 410, pl. 8, figs. 11–14.] monotype from Szob Hungary, Tortonian, Miocene, **Strausz, L.** (1).

†*Hindsia* (*Nihonophos*) *magnifica shimajiriensis* **subgen.** and **subsp. nov.** p. 72, pl. 3, figs. 22–23 Miocene, Yonabaru clay member, Iwa; *H.* (*N.*) *magnifica okinavia* **subsp. nov.** p. 72, pl. 13, fig. 26; ? Miocene or Pliocene Shinzato tuff member, white Beach; *H.* (*N.*) *whitmorei* **sp. nov.** p 73, pl. 3, fig. 19; Miocene, Yonabaru clay member, Iwa; *H.* (*N.*) *takabanarensis* **sp nov.** p. 74, pl. 13, fig. 19; Miocene Yonabaru clay member, Takabanare Shima, Okinawa, **MacNeil, F. S.**

Ilyanassa obsoleta effects of X-rays on early cleavage stages; **Cather, J. N.**; *I. obsoleta* development of the embryo after removal of the mesentoblast cell, **Clement, A. C.**; *I. obsoleta* localization of phosphorus compounds in the egg, **Collier, J. R.** (1); *I. obsoleta* localization of ribonucleic acid in egg, **Collier, J. R.** (2).

†*Janiopsis hirasei* **sp. nov.** p. 77, pl. 13, figs. 20–21; Pliocene, Chinen sand Chinen-misaki, Okinawa, **MacNeil, F. S.**

†*Lathyrus d'anconae crassosiculus* **subsp. nov.** p. 62, pl. 14, figs. 83a, 83b; Pliocene, Altavilla, Italy, **Ruggieri, Bruno & Curti.**

Latirus nodus, figured, **Anon,** (24).

†*Latirus* (*Neolatirus*) *danubicus* **nom. nov.** pro. *Fasciolaria bellardii* Hörnes 1856, (non Michelotti 1847) **Strausz, L.** (1).

Leucozonia nassa from Ubatuba, containing a polyclad worm in mantle cavity, **Smith, E. H.**

†*Loochooia* **gen. nov.** of Buccinidae p. 68, type. sp. *L. hanzawai* **sp. nov.** p. 68, pl. 8, fig. 12; Miocene or Pliocene Shinzato tuff member, Asato Okinawa, **MacNeil, F. S.**

†" *Macron* " *nipponensis* **sp. nov.** p. 115, pl. 9, figs. 10, 11; Ochiai N.E. Honshu Japan, Pliocene, **Chinzei, K.** (1).

†*Melongena coniformis* **sp. nov.** p. 272, pl. 31, figs. 20a–c; Pliocene Tungyüping, Pescadores Islands, Taiwan, **Hayasaka, I. & S.**

†*Mitrella gonzabuensis* **sp. nov.** p. 67, pl. 3, fig. 13; Miocene, Yonabaru clay member; Kakazu, Okinawa, **MacNeil, F. S.**

†*Molopophorus nipponicus* **sp. nov.** p. 218, pl. 7, figs. 6–8; Hashizume, Minano-machi Japan, Oligocene, **Kanno, S.**

Nassa reticulata pelagic larva in the Black Sea, fig., **Chukhchin, V. D.** (2).

†*Nassa* (*Sinunassa*) **subgen. nov.** q.v., p. 11, **Bofill** *in* **Bofill & Bataller**; *N.* (*Hima*) *brugnosis acquaevivae* **subsp. nov.** p. 112, pl. 5 figs. 28, 28a; *N.* (*H.*) *subverrucosa* p. 114, pl. 6, figs. 35–35b ; *N.* (*H.*) *stchepinskyi* p. 115, pl. 6, figs. 36–36b; **spp. nov.** Tertiary L. Messiniano, Casa i Gessi, Rep. S. Marino, **Moroni, M. A.** (2); *N.* (*Desmoulea*) *conglobata altavillensis* **subsp. nov.** p. 45, pl. 11, figs, 64a, 64b; Pliocene, Altavilla, Italy, **Ruggieri, Bruno & Curti**; *N.* (*Hinia*) *dorsaniformis* **sp. nov.** pp. 91, 143; pl. X, figs. 1–11, pl. XI, figs. 5–7; *N.* (*Phrontis*) *dujardini levis* **subsp. nov.** pp. 97, 145: pl. XII, figs. 7, 8, Kuzmice, Kiržań, E. Czechoslovakia, Tortonian (Miocene) **Švagrovský, J.**

Nassariidae of Australia, figs., distribution and nomenclature, **Cotton, B. C.** (10).

Nassarius obsoletus relationship between oxidative metabolism and geo-magnetic activity, **Barnwell, F. H.**; *N. obsoletus* magnetic field strength and orientation, **Brown & Barnwell**; *N. obsoleta* magnetic compass response, **Brown, Bennett & Webb**; *N. obsoleta* magnetic response and its solar relationships, **Brown, Brett, Bennett, et al.**; *N. obsoletus* relationship between photic and magnetic response in snails, **Brown & Huttrer**; *N. obsoleta* magnetic response and lunar relationships, **Brown, Webb & Brett.**

†*Nassarius* (*Niotha*) *fulleri* p. 80, pl. 13, figs. 27–28; Pliocene Chinen sand Yamashiro; *Nassarius* (? *Niotha*) *metuliformis* p. 80, pl. 3, fig. 29; Miocene, Yonabaru clay member, Okuma to Arakaki; *N.* (? *Niotha*) *acteon* p. 81, pl. 3, fig. 30; Miocene, Yonabaru clay member, Kakazu; *N.* (*Hinia*) *prefestivus* p. 81, pl. 13, fig. 31; Pliocene, Chinen sand Yamashiro; *N.* (*Zeuxis*) *subbalteatus* p. 82, pl. 8, fig. 22; Miocene or Pliocene, Shinzato tuff member, Hiyakuna **spp. nov.** Okinawa, **MacNeil, F. S.**

†Nassidae variation and systematic position, Sarmatian, Moldavia, **Roshka, V. K.**

Neptunea arthritica salivary poison, **Asano & Itoh**; *N. antiqua* salivary gland, **Fänge, R.**; *N. despecta* sensitivity to temperature, use as a stream index, **Golikov, A. N.**

†*Neptunea otukai* **sp. nov.** p. 112, pl. 9, figs. 12, 13; Ochiai, N.E. Honshu Japan, Pliocene, **Chinzei, K.** (1); *N. araii* **sp. nov.** p. 217, pl. 6, figs. 22a-b; Arakawa-mura Japan, Miocene, **Kanno, S.**; *N.* ? *dispar* (Takeda) lectotype designated p. 67, **Oyama, Mizuno & Sakamoto**; *Neptunea* sp. cf. *N. antiqua* (Linn.) from ground moraine Pleistocene near Ithaca, New York State, **Wells, J. W.**

†*Nihonophos* **subgen. nov.** of *Hindsia* p. 71; type. sp. *H.* (*N.*) *magnifica* Lischke see *Hindsia*, **MacNeil, F. S.**

†*Peristernia preluchuana* **sp. nov.** p. 86, pl. 8, fig. 25; Miocene or Pliocene, Shinzato tuff member Hiyakuna, Okinawa, **MacNeil, F. S.**

†*Phos* (*Tritaria*) *dingsi* **sp. nov.** p. 74 pl. 3, fig. 21; Miocene Yonabaru clay member, Iwa, Okinawa, **MacNeil, F. S.**

Pisania englerti **sp. nov.** p. 19, pl. 7, figs. 1, 2 ; Easter Island, **Hertlein, L. G.** (2).

Pleuroploca trapezium audouini spawning and diagrams of egg capsules, **Arakawa, K. Y.** (4); *P. trapezium audouini* egg capsules, **Habe, T.** (2).

†*Pleuroploca frimbriata amplectens* **subsp. nov.** p. 64, pl. 14, figs. 80a, 80b; Pliocene, Altavilla, Italy, **Ruggieri, Bruno & Curti.**

†*Plicifusus agumensis* **sp. nov.** p. 215, pl. 7, figs. 3–5; Nenokami, Yoshida-machi, Japan, U. Oligocene, **Kanno, S.**

†*Pseudolatirus yonabaruensis* **sp. nov.** p. 83, pl. 4, figs. 1–4; Miocene, Yonabaru clay member; Iwa, Okinawa **MacNeil, F. S.**

Reticunassa praematurata Kuroda and Habe (**sp. nov.**) p. 296, distribution Akune, Kagoshima Pref., *R. chibi* **sp. nov.** p. 297 type locality Tomioka, Amakusa, Kumamoto Pref., **Habe, T. (4).**

Searlesia modesta first record from Tongyoung, Korea, **Yoo, J. S.**

†*Semifusus talovensis* **sp. nov.** p. 259, pl. 6, f. 3–3a, Senonian, Talovka river, northern Kamchatka, N.E. U.S.S.R., **Liverovskaya, E. V.**

†*Sinunassa* **subgen. nov.** p. 11 of *Nassa* no type stated, Miocene Spain, **Bofill** *in* **Bofill & Bataller.**

Siphonalia cassidariaeformis egg capsules in Japan, **Habe, T. (2).**

†*Siphonalia yonabaruensis* p. 69, pl. 3, figs. 14–15; Miocene, Yonabaru clay member; Kakazu; *S. subspadicea* p. 69, pl. 13, figs. 15, 16; Pliocene, Chinen sand White Beach; **spp. nov.** *S. mikado makiyamai* **subsp. nov.** p. 70, pl. 8, fig. 17; Miocene, Yonabaru clay member, Iwa; *S. laddi* **sp. nov.** p. 71, pl. 8, fig. 16; Miocene or Pliocene Shinzato tuff member, Asato Okinawa, **MacNeil, F. S.**

†*Streptochetus paeteliana riukiuana* **subsp. nov.** p. 86, pl. 4, fig. 10, Miocene, Yonabaru clay member, Iwa, Okinawa, **MacNeil, F. S.**

†*Trominina hokkaidoensis* (Hayasaka and Uozumi) lectotype designated p. 63, *T. umbelliformis* (H. and U.) lectotype designated p. 64, **Oyama, Mizuno & Sakamoto.**

Zafra validicosta **sp. nov.** p. 297, type locality Tomioka, Amakusa, Kumamoto Pref., **Habe, T. (4).**

VOLUTACEA

Admete decapensis **sp. nov.** South Africa, 438, *439* text fig. 1a. **Barnard, K. H. (3).**

†*Afer chinenensis* **sp. nov.** p. 76, pl. 8, fig. 19; pl. 15, figs. 23–24; Miocene or Pliocene, Shinzato tuff member, Okinawa, **MacNeil, F. S.**

†*Ancilla* (*Turrancilla*) *chinenensis* **sp. nov.** p. 87, pl. 8, fig. 30; Miocene or Pliocene, Shinzato tuff member Okinawa, **MacNeil, F. S.**

†*Ancillina iwaensis* **sp. nov.** p. 88, pl. 4, fig. 12; Miocene Yonabaru clay member, Iwa, Okinawa, **MacNeil, F. S.**

†*Benthovoluta okinavensis* **sp. nov.** p. 96, pl. 9, figs. 2–3; Miocene or Pliocene, Shinzato tuff member, Asato Okinawa, **MacNeil, F. S.**

Cancellaria euthymei **sp. nov.** South Africa, 438, text fig. 1b. **Barnard, K. H. (3).**

†*Cancellaria* (*Merica*) *harmeri* **nom. nov.** p. 2; for *Merica contorta* Harmer 1914–25; (partim. non. Basterot 1825 nec Kautsky 1925) Scaldisien, Belgium, **Glibert, M. (2)**; *C. yonabaruensis* p. 98, pl. 5, fig. 4, Miocene, Yonabaru clay Gushichan; *C. chinenensis* p. 99, pl. 14, fig. 12; Pliocene, Chinen sand, Chinenmisaki **spp. nov.** Okinawa, **MacNeil, F. S.**

Charitodoron Tomlin, transferred from Buccinidae to Mitridae as a subgenus of *Mitra*, **Barnard, K. H. (2).**

Cottonia nodiplicata (Cox) of unusually large size, **Weaver, C. S. (1).**

Cylindromitrinae figs., nomenclature and Australian distribution, **Cotton, B. C. (15).**

Fulgoraria (*Musashia*) **subgen. nov.** type *Fulgoraria hirasei* (Sowerby) pl. 1, figs. 3, 4; *F.* (*M.*) *noguchii* **sp. nov.** Enshu-Nada, Japan, p.3, pl. 1, figs. 1, 2; List of *Fulgoraria* spp. **Hayashi, S.**

†*Fulgoraria* (*Psephaea*) *fujimotoi* **sp. nov.** p. 219, pl. 7, figs. 9–10; Tomita, Chichibu-city Japan, Oligocene, **Kanno, S.**; *F.* (*Psephaea*) *magna* (Takeda) lectotype designated p. 79, **Oyama, Mizuno & Sakamoto.**

Guivillea alabastrina Watson rediscovery off Cape Point, S. Africa, **Barnard, K. H. (1).**

†*Lyria hanzawai* **sp. nov.** p. 98, pl. 9, fig. 7; Miocene or Pliocene, Shinzato tuff member, Gushichan, Okinawa, **MacNeil, F. S.**

†*Marginella tomuiensis* **sp. nov.** p. 99, pl. 9, figs. 8–9; Miocene or Pliocene Shinzato tuff member, Asato; Okinawa, **MacNeil, F. S.**; *M. rushmerensis* **sp. nov.** p. 104, figs. 5, 6; Yorktown formation Miocene, James River, Rushmere, Isle of Wight County, Virginia, **Oleksyshyn, J.**

Mitra nigra Schröter 1788. Range extension and synonymy; not previously recorded from Hawaiian waters, **Cate, J. M.**; *M. erythrogramma* Tomlin 1931, range extension 900 miles northward of the previously reported range (S. Colombia to N. Nicaragua), **Sphon, G. G., jr.**

†*Mitra* (*Cancilla*) *yonabaruensis* p. 94, pl. 4, fig. 29; Miocene, Yonabaru clay member, Iwa; *M.* (*Fusimitra*) *loochooensis* p. 95, pl. 4, figs. 26–27, 32–33; Miocene, Yonabaru clay member, Iwa Okinawa **spp. nov. MacNeil, F. S.**; *M.* (*Scabricula*) *alligata altavillensis* **subsp. nov.** p. 83, pl. 19, figs. 114a, 114b; Pliocene, Altavilla, Italy, **Ruggieri, Bruno & Curti.**

Mitrinae, figs., nomenclature and Australian distribution, **Cotton, B. C. (15).**

Musashia **subgen. nov.** of *Fulgoraria* q.v., subgenotype *Fulgoraria hirasei* (Sowerby), **Hayashi, S.**

Nannamoria parabola **sp. nov.** p. 3, pl. 1, figs. 1A–1B, In 125 fathoms off Moreton Island, Queensland, **Garrard; T. A.**

Narona nodulifera first record from Kangnung, Korea, **Yoo, J. S.**

†*Narona* (*Sveltella*) *ravni* **nom. nov.** pro *Cancellaria angulifera* Koenen, 1885; non Deshayes 1865; p. 73, Eocene, Copenhagen, Denmark, **Glibert, M. (1).**

Oliva sayana detailed anatomical study, **Marcus, Ev. & Er. (1).**

†*Oliva mustellina paucicallosa* **subsp. nov.** p. 88, pl. 4, figs. 8, 13; Miocene, Yonabaru clay member, Kakazu, Okinawa, **MacNeil, F. S.**

Olivancillaria (*Lintricula*) *auricularia* and *O.* (*O.*) *brasiliensis*, detailed anatomical study, **Marcus, Ev. & Er. (1).**

Olivella fulgurata spawning and spawning season in Japan, **Habe, T. (2)**; *O. biplicata* trace elements in modern and fossil shells, **Krinsley, D.**; *O. verreauxii* detailed anatomical study, **Marcus, Ev. & Er. (1)**; *O. verreauxii* reproduction, **Marcus, Ev. & Er. (2)**; *O. biplicata* population study in California, **Stohler, R. (2).**

Olividae—catalogue of recent and fossil forms, **Burch, J. Q. & R. L. (2)**; Olividae of Australian waters, taxonomy, nomenclature and figs., **Cotton, B. C. (9).**

†*Paleopsephaea sacramentica* **sp. nov.** p. 845; pl. 102, figs. 8, 9; Bald Hills formation, Cretaceous: California, **Murphy & Rodda.**

Paramoria **gen. nov.** p. 12 of Volutidae type sp. *Voluta guntheri* Smith 1886, South Australia, **McMichael, D. F.**

†*Pseudolivella* **subgen. nov.** p. 20, Of *Olivancillaria* type sp. *Olivella impressa* Vasseur 1881; Eocene, Paris Basin, **Glibert, M. (1).**

†*Pusia meganodosa* **sp. nov.** p. 89, pl. 19, fig. 19; Pleistocene Yontan limestone, Tengan, Okinawa, **MacNeil, F. S.**

†*Teramachia shinzatoensis* **sp. nov.** p. 96, pl. 9, fig. 1; Miocene or Pliocene, Shinzato tuff member, Shinzato, Okinawa, **MacNeil, F. S.**

†*Trigonostoma smithfieldensis* **sp. nov.** p. 101, figs. 1, 2; Yorktown formation Miocene, N. of Smithfield, Isle of Wight County, Virginia, **Oleksyshyn, J.**

†*Uromitra cophina gonzabuensis* **subsp. nov.** p. 90, pl. 4, figs. 18–19; Miocene, Yonabaru clay member; Kakazu *U. teschi* **sp. nov.** p. 90, pl. 8, fig. 28; Miocene or Pliocene, Shinzato tuff member *U. fulleri* **sp. nov.** p. 91, pl. 8, fig. 29; Miocene or Pliocene, Shinzato tuff member; White Beach; Okinawa, **MacNeil, F. S.**

Vexillinae figs., nomenclature and Australian distribution, **Cotton, B. C. (15).**

†*Vexillum* (*Uromitra*) *chavani* **sp. nov.** p. 31, Stampien (Eocene) Gaas (Lesbarritz) (Béarn), *V.* (*U.*) *recticosta salbriacense* **subsp. nov.** p. 33 Burdigalian, Saubrigues (Landes), France, **Glibert, M. (1).**

Volutidae, Western Australian species found by the Hawaiian Expedition, lists and figures, **Weaver, C. S. (2).**

Volutomitrinae figs., nomenclature and Australian distribution, **Cotton, B. C. (15).**

CONACEA

†*Agladrillia nakazaensis* **sp. nov.** p. 113, pl. 9, figs. 20, 31; Miocene or Pliocene Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

†*Alticlavatula* **subgen. nov.** p. 109 of *Clavatula* type-sp. *Pleurotoma patruelis*, also includes *Drillia dainichiensis* Yokoyama, *Clavatula dainichiensis viva*, *C. taiwanensis*, *Pleurotoma djocdjocartae* and *P.d. serana*, **MacNeil, F. S.**

†*Bathytoma* (*Bathytoma*) *michailensis* **sp. nov.** p. 295, Pl. 4, f. 2, 3. Lower Oligocene, Burlyu, Manghyshlak, Kazakhstan, **Ilyina, A. P. (3);** *B. cataphracta* **subsp. nov.** p. 257, pl. 29, fig. 167; Pliocene, Altavilla, Italy, **Ruggieri** *in* **Ruggieri & Curti.**

†*Bela peyroti* **nom. nov.** p. 28 for *Mangelia* (*Clathurella*) *turonensis* Peyrot 1938 non *Mangelia turonensis* idem Pontilevian, Miocene, Loire Basin, **Glibert, M. (2).**

†*Borsonella shinzato* **sp. nov.** p. 114, pl. 9, fig. 18; Miocene or Pliocene Shinzato tuff, Gushichan, Okinawa, **MacNeil, F. S.**

†*Borsonia shimajiriensis* **sp. nov.** p. 114, pl. 9, fig. 32, Miocene or Pliocene Shinzato tuff, Gushichan, Okinawa, **MacNeil, F. S.**

†*Buccinaria okinawa* p. 119, pl. 6, figs. 3, 9; pl. 10, figs. 2–3; Miocene, Yonabaru clay, Iwa; *B.* (*Ootomella*) *loochooensis* p. 120, pl. 15, figs. 5–9; Miocene or Pliocene, Shinzato tuff Okinawa **spp. nov., MacNeil, F. S.**

†*Clavatula sublaevigata* p. 80, pl. 3, figs. 1a–c; *C. orientoromana* p. 82, pl. 3, figs. 6a–b; Szokolya, Tortonian Miocene, Hungary, **Bálpi, T.**; *C.* (*Alticlavatula*) **subgen. nov.** q.v., **MacNeil, F. S.**; *C. schreiberi szokolyensis* **var. nov.** pp. 351, 354; pl. XX, figs. 2, 5; Szokolya, Hungary, Tortonian Miocene, **Strausz, L. (1).**

Clavus jeffreysii first record from Tongyoung, Korea, **Yoo, J. S.**

†*Clavus* (*Brachytoma*) *hungaricus* **sp. nov.** p. 84, pl. 3, figs. 4a–b; Szokolya, Hungary, Tortonian Miocene, **Báldi, T.**

†*Clinura anassa* **sp. nov.** p. 845; pl. 102, fig. 5; Coyote Creek California, Bald Hills formation, Cretaceous; **Murphy & Rodda.**

†*Compsodrillia*? *torvita* **sp. nov.** p. 113, pl. 9, fig. 25, Miocene or Pliocene, Shinazto tuff, Asato, Okinawa; **MacNeil, F. S.**

Conus from the Trincomalee region of Ceylon, ecological notes, **Kohn, A. J. (2);** *C. aegrotus* Reeve, on the species, **Anon (8);** *C. pulicarius* a deformed specimen, **Anon (9)** *C. geographicus*, a further death from " bite," **Anon, (11);** *C. suturatus* Reeve, **Anon (18);** *C. ebraeus* a malformed specimen, **Anon, (20);** *C. elisae* differences in Hawaiian and African forms, **Anon, (25);** *C. mus* Bruguiére in the eastern Pacific, **Burch, J. Q. (3);** *C. marmoreus* attacking *Lambis*, **Frost, R. M.**; *C. geographicus*, *C. textile*, *C. aulicus*, *C. marmoreus*, *C. imperialis*, *C. lividus*, *C. nanus*, *C. obscura*, *C. tulipa*, *C. omaria*, *C. striatus* and *C. pulicarius* venom study in the Far East, **Keegan, H. L.**; *C. striatus* venom, **Kohn, Saunders & Wiener** *C. mediterraneus* histological study of the posion gland, **Martoja, M.**; *C. marmoreus*, *C. striatus* and *C. textile* with poisonous barbs, **Trefz, S. M.**; *C. mus* Hwass; *C. jaspedius* Gmelin; *C. ranunculus* Hwass; *C. spurius* Gemlin; *C. daucus* Hwass; *C. juliae* Clench; *C. regius* Gmelin, notes on the species and figs. of radulae, **Warmke, G. L.**

†*Conus adversarius tryoni* on the species from the Pliocene, **Anon (13);** *C. yoshidensis* **sp. nov.** p. 220, pl. 7, figs. 11–12; Nenokami, Yoshida-machi, Japan, U. Oligocene, **Kanno, S.**; *C. precancellatus* p. 122, pl. 10, fig. 11; Miocene or Pliocene, Shinzato tuff; Hiyakuna, *C. shimajiriensis* p. 122, pl 6, figs. 5, 11; Miocene, Yonabaru clay, Iwa, Okinawa, *C. loochooensis* p. 124, pl. 7, fig. 24; pl. 10, fig. 12; Miocene or Pliocene, Shinzato tuff; Hiyakuna Okinawa, **spp. nov., MacNeil, F. S.**

†*Coronasyrinx takabanarensis* **sp. nov.** p. 109, pl. 5, fig. 21; Miocene, Yonabaru clay, Takabanareshima, Okinawa-gunto, **MacNeil, F. S.**

Crassispira grandimaculata C.B. Adams, 1852, range extension 900 miles northward of the previously reported range (S. Panama to N. Nicaragua) **Sphon, G. G. Jr.**

†*Crassispira chavani* **sp. nov.** p. 26; pl. V, fig. 10; Redonian (Mid. Miocene), Loire Basin; **Glibert, M. (2);** *C. hataii* **sp. nov.** p. 112, pl. 5, fig. 30; pl. 6, fig. 1; Miocene, Yonabaru clay, Iwa, Okinawa, **MacNeil, F. S.**

Cythara sp. pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2).**

†*Daphnella ryukyuensis* **sp. nov.** p. 118, pl. 10, fig. 1; pl. 15, fig. 4; Miocene or Pliocene, Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

†*Drillia* (*Tripia*) *bajarunasi* **sp. nov.** p. 294, pl. 4, f. 12, a, b, v. Burlyu, Manghyshlak, Kazakshtan. Lower Oligocene, **Ilyina, A. P. (3);** *D.* (*Crassispira*) *pustulata sanmarinensis* **subsp. nov.** p. 117, pl. 5, fig. 29; *D.* (*C.*) *gypsorum* **sp. nov.** p. 119, pl. 6, fig. 32; Casa i Gessi, Rep. S. Marino, Tertiary, L. Messiniano, **Moroni, M. A. (2).**

†*Eoturris* **sp. nov.** p. 24, pl. 2, fig. 45; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

†*Etrema saplisi* **sp. nov.** p. 116, pl. 15, fig. 10; Pliocene, Chinen sand White Beach, Okinawa, **MacNeil, F. S.**

†*Euclathurella fimbria* **sp. nov.** p. 117, pl. 15, fig. 2; Pliocene, Chinen sand, Okinawa, **MacNeil, F. S.**

†*Gemmula granosa ryukyuensis* **subsp. nov.** p. 103, pl. 14, fig. 24; Miocene Yonabaru clay; Takabanareshima, Okinawa, **MacNeil, F. S.**

†*Glyphostoma subcostricrenata* **sp. nov.** p. 116, pl. 14, fig. 26; Pliocene, Chinen sand, Okinawa, **MacNeil, F. S.**

†*Haedropleura beetsi* **sp. nov.** p. 12, pl. IV, fig. 11; Scaldisian, Belgium, **Glibert, M. (2).**

Hastula genus and species, Hawaiian Islands, **Weaver, C. S. (3).**

†*Leucosyrinx iwaensis* **sp. nov.** p. 109, pl. 9, fig. 24; Miocene or Pliocene, Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

†*Lioglyphostoma tenuata* p. 116, pl. 15, fig. 1; Miocene or Pliocene, Shinzato tuff Gushichan, *L. chinenensis* p. 117, pl. 15, fig. 3; Pliocene, Chinen Sand, Chinenmisaki, Okinawa, **spp. nov. MacNeil, F. S.**

†*Magnella* **gen. nov.** p. 425 of Daphnellinae, Turridae, type. sp. *M. andersoni* **sp. nov.** p. 426, text-figs. 1a–c; Burdigalian (Miocene) Schleswig-Holstein, **Dittmer, E.**

†*Makiyamaia* **gen. nov.** (Kuroda MSS) p. 106, of Turriculinae, (ex Oyama 1952, nom. nud. ex. Kira 1955, nom. nud.) type *Pleurotoma coreanica* Adams and Reeve, *M. c. okinavensis* **var. nov.** p. 108, pl. 14, fig. 22, Miocene or Pliocene, Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

Mangelia brachystoma anatomical study, **Robinson, E.**

†*Mangelia* (*Cytharella*) *vandewouweri* **sp. nov.** p. 14, pl. 4, fig. 9; pl. 5, fig. 2. Scaldisian, Belgium; *M.* (cf. *Adelocythara*) *ligeriana* **nom. nov.** p. 28 pro *M. angulata* Glibert 1954, Pontilevian, Loire Basin; *M.* (*Agathotoma*) *pherousae* **sp. nov.** p. 26, pl. 5, fig. 12; Middle Miocene, Loire Basin, **Glibert, M. (2);** "*Mangelia*" *china* **sp. nov.** p. 115, pl. 9, fig. 26; Miocene or Pliocene Shinzato tuff, Okinawa, **MacNeil, F. S.**

†*Mauidrillia ? kachabaruensis* **sp. nov.** p. 110, pl. 9, figs. 27, 30; Miocene or Pliocene, Shinzato tuff, Hiyakuna, Okinawa, **MacNeil, F. S.**

†*Micantapex ? tomuiensis* **sp. nov.** p. 105, pl. 9, fig. 16; Miocene or Pliocene Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

†*Neoguraleus kutekinensis* p. 115, pl. 14, fig. 27; Pliocene, Chinen sand, Chinen-misaki; *N. loochooensis* p. 115, pl. 9, fig. 23; Miocene or Pliocene Shinzato tuff Asato **spp. nov.**, Okinawa, **MacNeil, F. S.**

†*Nihonia* **gen. nov.** p. 105 of Turriculinae type. sp. *N. shimajiriensis* **sp. nov.** p. 105, pl. 5, fig. 15; Miocene Yonabaru clay, Yonabaru, Okinawa, **MacNeil, F. S.**

†*Paracomitas rodgersi* **sp. nov.** p. 106, pl. 9, fig. 17; Miocene or Pliocene Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

†*Pinguigemmula* **gen. nov.** p. 103, of Turrinae type. sp. *P. okinavensis* **sp. nov.** p. 104, pl. 9, figs. 12–14; Miocene or Pliocene, Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

†*Pleurotoma liwerowskajae* **sp. nov.** p. 290, pl. 3, f. 22–24. Burlyu, Manghyshlak, W. Kazakhstan, Lower Oligocene, **Ilyina, A. P. (3).**

†*Pleurotomella ? ryukyuensis* **sp. nov.** p. 117, pl. 9, fig. 22, Miocene or Pliocene, Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

†*Pseudobellardia? miikensis* (Nagao) lectotype designated p. 23, **Oyama, Mizuno & Sakamoto.**

†"*Rugobela*" *oborni* **sp. nov.** p. 24, pl. 2, fig. 51. Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1).**

†*Spergo fusus* **sp. nov.** p. 118, pl. 10, figs. 4, 9; Miocene or Pliocene, Shinzato tuff, Asato, Okinawa, **MacNeil, F. S.**

†*Splendrillia nomurai* p. 111, pl. 5, fig. 25; Miocene, Iwa; *S. incompta* p. 111, pl. 5, fig. 26; Miocene, Iwa; *S.* (*Syntomodrillia*) *atsutaensis* p. 111, pl. 5, fig. 31, Miocene, Atsuta; **spp. nov.** Okinawa, **MacNeil, F. S.**

†*Suavodrillia oyamai* **sp. nov.** p. 116, pl. 9, figs. 1–5, Ochiai N.E. Honshu, Japan, Pliocene, **Chinzei, K. (1).**

†*Surcula* (*Ancistrosyrinx*) *mangyschlakensis* **sp. nov.** p. 292, Pl. 4, f. 6, 6a. Tyub-Karagan, Manghyshlak, Kazakhstan, Lower Oligocene, **Ilyina, A. P. (3).**

Terebra, Hawaiian species studied; *T. spaldingi* Pilsbry 1920, considered a subsp. of *T. cerithina* Lam. p. 14; *T. langfordi angustior* Pilsbry 1920, considered to equal *T. langfordi*, p. 6; *T. achates* (Dall MSS) **sp. nov.** p. 2, pl. 1, Hawaiian Islands, **Weaver, C. S. (3);** *T. evoluta* first record from Tongyoung, Korea, **Yoo, J. S.,**

†*Terebra laudata* **sp. nov.** p. 11, pl. 1, fig. 6, Tertiary Arroyo Verde Patagonia, Argentina, **Garcia, E. R. de;** *T.* (*Terebrellina*) *inversa harmeri* **subsp. nov.** p. 18, pl. 4, fig. 21a; *T.* (*Terebrellina*) *i. subharmeri* **var. nov.** p. 19, pl. 4, fig. 21d; Scaldisian, Belgium, **Glibert, M. (2);** *T.* (*Strioterebrum*) *sinuosa* **sp. nov.** p. 221, pl. 7, figs. 13a–b; Tochiya, Chichibu-city Japan, Miocene, **Kanno, S.** *T. shimajiriensis* **sp. nov.** p. 126, pl. 6, fig. 30; Miocene Yonabaru clay, Majikin, Okinawa, **MacNeil, F. S.;** *T. chancellorensis* **sp. nov.** p. 103, figs. 3, 4; St. Mary's formation, Miocene, Chancellor Point, St. Mary's County, Maryland, **Oleksyshyn, J.;** *T.* (*Hastula*) *striata cserhatensis* **nom. nov.** p. 325 pro *Terebra* (*Hastula*) *hungarica* Meznerics 1954 non Halaváts 1884, Mátraverebély Hungary, Miocene, **Strausz, L. (2).**

†*Unedogemmula* **gen. nov.** p. 101, of Turrinae type-sp. *Turris unedo* (Keiner) (as fig. by Hirase), *U. ina* **sp. nov.** p. 102, pl. 5, fig. 7; Miocene, Yonabaru clay, Iwa, Okinawa, **MacNeil, F. S.**

Opisthobranchiata

Opisthobranchia from Afognak and Sitkalidak Islands, Kodiak Group, Alaska, **Eyerdam, W. J. (2);** Catalogue of the Opisthobranchs of Villefranche sur Mer, **Haefelfinger, H. R. (2).**

BULLACEA

†Actaeoninidae Pchelintzev **fam. nov.** p. 242 of Acteonacea for *Actaeonina, Ovactaeonina, Cylindrobullina, Trochactaeonina, Euconactaeon* Carboniferous, **Pchelintzev & Korobkov [in Orlov].**

Acteon tornatilis as the prototype of the pulmonate genital system, **Duncan, C. J. (2).**

†*Acteon sullivanae* **sp. nov.** p. 846, pl. 102, fig. 2; Gas Point Road, California, Bald Hills formation, Cretaceous, **Murphy & Rodda.**

†*Atys ? okinawa* **sp. nov.** p. 127, pl. 6, fig. 21; Miocene, Yonabaru clay Iwa, Okinawa, **MacNeil, F. S.**

Bulla gouldiana chitin present in stomach teeth and organic periostracum, **Winkler, L. R.**

Cylichna orzya fourth most common species at the surface of sediments in Buzzards Bay, Mass., **Sanders, H. L. (2).**

†*Cylichna kantoensis* **sp. nov.** p. 222, pl. 7, figs. 14a–b; Tomita, Chichibu-city, Japan, Oligocene, **Kanno, S.**; *C. andersoni* **sp. nov.** p. 847 pl. 102, figs. 3, 4; Coyote Creek, California, Bald Hills formation, Cretaceous, **Murphy & Rodda.**

Haminea navicula atypical spermatozoa and oocytes, **Dupouy, J. (2).**

Philine quadripartita acid fluid secretion by the whole integument, **Thompson, T. E. (2).**

Retusa truncatula pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2).**

†*Retusa* (*Cylichnina*) *elongata mio-pliocenica* **subsp. nov.** p. 87, pl. 10. fig. 56; Lower Messiniano, Tertiary, Casa i Gessi, Rep. S. Marino, **Moroni, M. A. (2).**

Ringicula buccinea general anatomical study, **Fretter, V.**

†*Scaphander yonabaruensis* **sp. nov.** p. 128, pl. 6, fig. 20; Miocene, Yonabaru clay, Okinawa, **MacNeil, F. S.**

Thyonicola mortenseni found in *Cucumaria miniata* and *C. lubrica*, first record for American waters; one specimen longest parasitic gastropod reported (303.5 cm.). " Opisthobranch not Nudibranch." **Tikasingh, E. S.**

APLYSIACEA

Aplysia reticulopoda **sp. nov.** p. 144, pls. 46–48; Subtidal zone, Laguna, Orange County, California, **Beeman, R. D.**; *A. depilans* studies on the nuclear apparatus during egg development, **Bolognari, A. (3)**; *A. depilans* electron microscope study of oocyte yolk formation, **Bolognari, A. (6)**; *A. depilans* golgi bodies and zones in oocytes, **Bolognari, O.**; *A.* (*Varria*) **subgen. nov.** q.v. *A. dactylomela* used as an example to show correct description procedure, **Eales, N. B. (3)**; *A. donca* **sp. nov.** p. 251; figs. 1–5; Texas, Mustang Island; Port Aransas, **Marcus, Ev. & Er. (4)**; *A. depilans* heart activity and the role of the nervous system, **Gersch & Deuse**; *A. punctata* Cuvier, in Manx waters, note on life history, **Miller, M. C.**; *A. kurodai* pigment of the purple secretion and the orange ova, **Nishibori, K.**; *Aplysia* activity of cells in disconnected nerve ganglia, **Tauc, L. (1)**; *Aplysia* origin and propagation of the efferent potential in the giant neurone, **Tauc, L. (2)**; *A. depilans* acetyl choline transmission of synaptic inhibition, **Tauc & Gerschenfeld, (1)**; *A. californica* stomach teeth and organic shell tested for chitin and found positive, **Winkler, L. R.**

Petalifera habei **sp. nov.** p. 12, text-figs 1c, d; 2, 3b; 4b, 5; Amakusa Bay, Japan, comparison with *P. petalifera*, **Eales, N. B. (1)**; *P. ramosa* Baba 1959 antedates and so replaces *P. habei* Eales, 1960, **Eales, N. B. (2)**. *Phyllaplysia zostericola* **sp. nov.** p. 550, figs. 1a–d; 2–6; Nanaimo, British Columbia, **McCauley, J. E.**

Varria **subgen. nov.** of *Aplysia* p. 297, subgenotype *V. cronullae* p. 304, text-figs. 19, 20; New South Wales; *V. gracilis* p. 320, text-fig. 26, Red Sea; *V. rehderi* p. 337, text-figs. 32, 33; Monterey, California; *V. reticulata* p. 340, text-fig. 34, N.W. Australia; *V. dura* p. 360 text-figs, 42, 43; Tristan da Cunha **spp. nov., Eales, N. B. (3).**

PTEROPODA

Pteropoda from Afognak and Sitkalidak Islands, Kodiak Group, Alaska, **Eyerdam, W. J. (2)**; Pteropoda as food of the fish genera *Thunnus* and *Alepisaurus*, **Russell, H. D.**

Cavolinia inflexa from the region of Corsica and Elba **Furnestin, M.-L.**

Corolla pelagic ciliary feeder, **Morton, J. E. (1).**

Cresis [= *Creseis*] *acicula* in a salt water lagoon near Mandapam, India, **Tampi, P. R. S.**

Limacina inflata and *L. bulimoides* occurrence in the Benguela current zooplankton, **Hart & Currie**; *L. retroversa* oesophageal gizzard and stomach, **Morton, J. E. (1).**

Pneumodermopsis paucidens from the Benguela current preying on *Limacina bulimoides*, **Hart & Currie,**

SACOGLOSSA

ELYSIACEA

Bosellia mimetica structure and function of genital systems, **Becker, R.**

Branchophyllum pallens new name for *Cyerce nigra pallens* q.v. Burn 1957, **Burn, R. (4).**

Costasiella nonatoi **sp. nov.** p. 149, figs. 26–33; Ubatuba, east of Santos, Brazil, **Marcus, Ev. & Er. (3).**

Cyerce nigra pallens Burn 1957 proves not to be a *Cyerce* Bergh 1871 (= *Lobifera* Pease 1866) so now known as *Branchophyllum pallens* based on characteristics of the foot, **Burn, R. (4).**

Elysia (*E.*) *hamatanii* egg laying and veliger development, **Hamatani, I. (1)**; *E. chlorotica* from Chesapeake Bay, Maryland, **Pfitzenmeyer, H. T. (2)**; *E. viridis* genital organs, **Pruvot-Fol, A.**

Limapontia capitata in the Black Sea, fig'd, with radula, **Chukhchin, V. D. (1)**; *L. capitata* pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2).**

Stiliger bellulus from the Black Sea, fig'd. with radula, **Chukhchin, V. D. (1)**; *S. bellulus* pelagic larva in the Black Sea, fig., **Chukhchin, V. D. (2)**; *S.* (*Stiliger*) *boodleae* description of egg laying and veliger development, **Hamatani, I. (1)**; S. (*S.*) *vossi* **sp. nov.** p. 144, figs. 18–21; Biscayne Bay, and E. coast of Virginia Key, Miami, **Marcus, Ev. & Er. (3).**

PLEUROBRANCHIACEA

Berthella plumula epidermal acid secreting cells, **Thompson, T. E. (2).**

Pleurobranchus membranaceus defensive acid secretion and locomotion, **Thompson, T. E. (1)**; *P. membranaceus* histology of the epidermal acid secreting cells of the foot and mantle, **Thompson, T. E. (2).**

Tylodina corticalis a rare S.-E. Australian gastropod described and figured, **Burn, R. (3).**

TAMANOVALVACEA

Berthelinia typica from the coast of New South Wales, **Burn, R. (1)**; *B. typica* an Australian bivalved gastropod, **Burn, R. (5)**; *B.* and other possibly related genera, **Keen, A. M. (3)**; *Berthelinia*, a bivalve gastropod, **Keen, A. M. (5).**

Edenttellina typica from Torquay, Victoria, Australia, **Burn, R. (1)**; *Edenttellina*, a bivalve gastropod, **Keen, A. M. (5).**

Midorigai **gen. nov.** p. 45; *M. australis* **sp. nov.** p. 46; text-figs. 8–14; Torquay & Flinders, Victoria, Australia, **Burn, R. (5)**; *Midorigai australis* from Sydney Harbour, New South Wales, **Burn, R. (2).**

Tamanovalva limax from Japan general structure, **Chopard, L.**; *T. limax* structure, and main features discussed, **Cox & Rees**; *T. limax* formation of the adductor muscle, **Kawaguti & Yamasu** (1); *T. limax* spawning habits, **Kawaguti & Yamasu** (2); *T. limax* study by electron microscopy of the adductor muscle, **Kawaguti & Yamasu** (3); *Tamanovalva* from Espirutu Santo Island, near La Paz, California, **Keen, A. M.** (5); *T. limax* a general account, **Ortiz, E.**; *T. limax* a general note on this bivalved gastropod, **Tortonese, E.**

Nudibranchiata

Nudibranchiata, cholinesterase activity in early development, **Buznikov, G. A.**; Nudibranchia from Afognak and Sitkalidak Islands, Kodiak Group, Alaska, **Eyerdam, W. J.** (2).

DORIDACEA

Greilada abei **sp. nov.** p. 75; pl. VI figs. 1a–1d; Amaharashi, Toyama Bay, Japan, **Baba, K.** (5).

Diaphorodoris papillata **sp. nov.** p. 182, text-fig. 7; *D. luteocincta* var. *reticulata* and *D. l.* var *alba* from the Mediterranean, **Portmann & Sandmeier** (1).

Discodoris hedgpethi **sp. nov.** p. 254; figs. 7–11; Texas, Port Aransas; **Marcus, Ev. & Er.** (4).

Galacera **gen. nov.** p. 58, Polyceridae genotype *Polycera marplatensis* (Franceschi); Mar del Plata; **Risso-Dominguez, C. J.**

Goniodoris sugashimae **sp. nov.** p. 82; pl. VIII, figs. 2a–2b; Sugashima, Toba, Japan, **Baba, K.** (2).

Gymnodoris nigricolor p. 72, pl. V figs. 1a–1b; Misaki, Sagami Bay; *G. subornata* p. 72, pl. V figs. 2a–2c; Seto, Kii, Japan, **spp. nov., Baba, K.** (1); *G. bicolor* egg laying and veliger development, **Hamatani, I.** (1).

Halgerda rubicunda figs. 1–2; veliger larval shell, and egg mass, Japanese, **Hamatani, I.** (2).

Nembrotha limaciformis radula and general description, Seto, Kii, Japan, **Baba, K.** (1).

Okenia (*Okenia*) *opuntia* p. 80, pl. VII; figs. 1a–1e; Tannowa Osaka Bay; *Okenia* (*O.*) *plana* p. 80, pl. VII, figs. 2a–2d; Toba; **spp. nov. Japan, Baba, K.** (2); *O. elegans* coloration, **Cartwright, R.-A.**

Palio amakusana **sp. nov.** p. 76, pl. VI; figs. 2a–2c; Tomioka, Amakusa, Japan, **Baba, K.** (5).

Plocampherus [= *Plocamopherus* Leuckart] *tilesii* egg mass and general diagrams of spawn, **Arakawa, K. Y.** (4).

Polycera quadrilineata from the Bay of Villefranche-sur-Mer; developmental study, **Haefelfinger, H.-R.** (3); *P. quadrilineata* structure and functioning of genitalia, **Pruvot-Fol, A.**

Rostanga rufescens coloration, **Cartwright, R. A.**

Staurodoris bobretzkii pelagic larva in the Black Sea, figs.; **Chukhchin, V. D.** (2).

Thecacera pennigera from Sugashima near Toba, Japan, radula figs., **Baba, K.** (5).

Trapania maculata **sp. nov.** p. 226, figs: 1–3, 6a, *T. lineata* **sp. nov.** p. 229; figs. 4a, 5, 6c, Villefranche-sur-Mer, France, **Haefelfinger, H.-R.** (1).

AEOLIDIACEA

Acochlidium amboinense and *A. weberi* from the Palau Islands, Pacific Ocean, **Bayer & Fehlmann.**

Aeolidia papillosa distribution in Portugal, new record at Caxias, **Almaça, C.**; *A. papillosa* cholinesterase activity in early development, **Buznikov, G. A.**; *A. papillosa* the role of water currents in orientation, **Haaften & Verwey**; *A. papillosa* genital organs, **Pruvot-Fol, A.**

Caloria maculata discussed structurally; from Villefranche-sur-Mer, **Haefelfinger, H.-R.** (1).

Catriona bicolor egg laying and veliger development, **Hamatani, I.** (1); *C. ornata* figs. 3–6, *C. pinnifera* figs. 7–9 egg mass, ovum, veliger stages, operculum and larval shell from Japan, **Hamatani, I.** (2); *C. maua* **sp. nov.** p. 177, figs. 74–79; East side Virginia Key, Florida, **Marcus, Ev. & Er.** (3).

Cerberilla tanna **sp. nov.** p. 259; figs. 18–19; Texas, Sabine Jetties, **Marcus, Ev. & Er.** (4).

Dendronotus frondosus cholinesterase activity in early development, **Buznikov, G. A.**; *D. frondosus* anatomy of the digestive gland, **Thompson, T. E.** (4).

Donice banyulensis **sp. nov.** p. 159; figs. 1–6; Banyuls-sur-Mer; France, **Portmann & Sandmeier** (2).

Doto coronata coloration in relation to habitat, **Cartwright, R. A.**; *D. divae* p. 165, figs. 54–57; *D. chica* p. 167, figs. 58–60; **spp. nov.** East coast of Virginia Key, Florida, **Marcus, Ev. & Er.** (3).

Eubranchus horii p. 300, pl. XXXIV figs. 1a–1e; Hayama, *E. misakiensis* p. 300, pl. XXXIV figs. 2a–2g; Misaki, Sagami Bay **spp. nov., Baba, K.** (3).

Herviella affinis **sp. nov.** p. 303, text fig. 1, A–E; Kada, Osaka Bay; Abugashima, Toyama Bay; Ogi, Toyama Bay; **Baba, K.** (4).

Janolus cristatus coloration, **Cartwright, R. A.**

Learchis poica **sp. nov.** p. 183, figs. 82–86; East Side Virginia Key, Florida, **Marcus, Ev. & Er.** (3).

Melibe pellucida Burn 1957 preoccupied by *M. pellucida* Bergh 1904 which is synonymous with *M. leonina* (Gould 1853) so *M. maugeana* is proposed for the Victorian species in place of the homonym, **Burn, R.** (4).

Scyllaea pelagica coloration habitat and diet, **Cartwright, R. A.**

Tergipes edwardsi and *T. adspersus* pelagic larvae in the Black Sea, figs., **Chukhchin, V. D.** (2).

Trinchesia aurantia role of water currents in orientation **Haaften & Verwey.**

RHODOPACEA

Rhodope veranii development, **Riedl, R.**

Pulmonata

Pulmonata: chromosome morphology of the aquatic species, **Burch, J. B.** (1); Chromosome studies on aquatic pulmonates; structure and histology of ovotestis; chromosome cycle during spermatogenesis; chromosome morphology and numbers, **Burch, J. B.** (2); Pulmonata from Afognak and Sitkalidak Islands, Kodiak Group Alaska, **Eyerdam, W. J.** (2); Survival of aestivating vectors of schistosomiasis, **Olivier, L.**

BASOMMATOPHORA

Basommatophora chromosomal study, **Natarajan, R.** (2).

ELLOBIACEA

Carychium stygium widely distributed in the caves of Kentucky, **Hubricht, L.** (8).

†*Carychium minimum* in the Tertiary of Kirgiziya; problem of the Upper Tertiary landscape of Inner Tien-Shan based on *Carychium* ecology, **Matekin, P. V.**

Detracia floridana chromosome studies, n = 18, **Burch, J. B. (2).**

Ellobiidae chromosome numbers in aquatic pulmonates **Burch, J. B. (1).**

Leucophytia bidentata position in the pulmonate genital system evolutionary scheme, **Duncan, C. J. (2)**; *L. bidentata* found alive in 3 localities in Zeeland viz. near Wolphaartsdijk (Zuid-Beveland), Kortgene (Noord-Beveland) and Strijenham (Tholen), **Metz, Vogel & Wolff.**

Melampus bidentatus lineatus chromosome studies, n = 18, **Burch, J. B. (2)**; *Melampus* ecological notes from Puerto Rico, **Golley, F. B.**

Ovatella (= *Phytia*) *myosotis* position in the evolution of the pulmonate genital system, **Duncan, C. J. (2).**

Phytia myosotis marylandica chromosome studies, n = 18, **Burch, J. B. (2)**; *P. myosotis* disappeared from the Marken Island fauna, **Butot, L. J. M. (2).**

AMPHIBOLACEA

Amphibolidae chromosome morphology, **Burch, J. B. (1).**

SIPHONARIACEA

Siphonariidae chromosome morphology, **Burch, J. B. (1).**

LYMNAEACEA

Acella haldemani chromosome studies, n = 18, **Burch, J. B. (2).**

Acroloxus improvisus and *A. macedonicus* from Lake Ochrid, **Hubendick, B. (2).**

Acrorbidae **fam. nov.** p. 67 for *Acrorbis* Odhner, previously placed in Planorbidae, *A. odhneri* p. 67 f. 1, 2, **sp. nov.** Aristobulo del Valle, Misiones, Argentina, **Scott, M. I. H. (1).**

Ancylidae chromosome morphology, **Burch, J. B. (1).**

Ancylus fluviatilis from England chromosome number n = 60, **Burch, Basch & Bush**; *A. lacustris* development of eggs in freshwater, **Cassarà, A.**; *A. fluviatilis* genital system structure, **Duncan, C. J. (1)**; *A. lapicidus* **sp. nov.** p. 512, pl. 2, figs. 4–6; pl. 3. figs. 1–3; text–fig. 14; *A. scalariformis*, *A. tapirulus* from Lake Ochrid, **Hubendick, B. (2).**

Anisus crassilabrum as an host of *Schistosoma* in Madagascar, **Capron & Brygoo**; *Anisus bachlongviensis* **sp. nov.** p. 5, pl. 1, f. 4, Bach Long Vi (Nightingale) Island, Gulf of Tongking, S. China Sea, **Saurin, E.**

Aplexa hypnorum chromosome studies, n = 18, **Burch, J. B. (2).**

Armiger crista chromosome studies, n = 18, **Burch, J. B. (2).**

Australorbis glabratus olivaceus conditions necessary for growth and reproduction; life history and egg laying frequency, **Azevedo, Costa Fara & Pequito**; *A. glabratus* elimination of ^{45}Ca through the skin, **Azevedo, Gil, Barreira & Gomes**; A. *glabratus olivaceus* study on cross and self fertilization and its significance in the number of descendants, **Azevedo & Pequito**; "*Australorbis* is in more general use than *Biomphalaria*"; given as one reason by author for rejecting Hubendick's proposal that *Biomphalaria* Preston be validated, **Baker, H. B. (2)**; *A. glabratus* host-parasite relationship with larval *Schistosoma mansoni*, **Barbosa, F. A. S.**; *A. glabratus* susceptibility of Brazilian strains to *Schistosoma*, **Barbosa & Barreto**; *A. glabratus*, and *A. nigricans*, comparative anatomy, **Barbosa & Coelho**; *A. glabratus bahiensis* & *A. g. olivaceus* morphobiological study of vectors of *Schistosoma mansoni* in Salvador, Brazil, **Barretto, A. C.**; *A. glabratus* nurse cells of the ovotestis, **Barth, R.**; *A. glabratus olivaceus* changes in the Golgi body during spermatogenesis, **Barth & Jansen (1)**; *A. glabratus olivaceus* "kinoplasma" in spermatogenesis, **Barth & Jansen (2)**; *A. glabratus* chromosome studies, n = 18, **Burch, J. B. (2)**; *A. glabratus* infection with *Schistosoma* under bacteriologically sterile conditions, **Chernin, E.**; *A. glabratus* effect of streptomycin on hatching eggs, **Chernin & Schork**; *A. glabratus* chemo-reception, **Michelson, E. H. (2)**; *A. glabratus* experimental aquarium, **Moore, D. V.**; *A. glabratus* effect on egg viability and fecundity of low concentrations of sodium pentachlorophenate, **Olivier & Haskins**; *A. stramineus* population variations in Pernambuco, Brazil, **Pinotti, Rey, Aragão et. al.**; *A. glabratus* cytology of the hepatopancreas, **Vasconcelos Frazao, J. (1).**

Biomphalaria Preston, proposed validation by Hubendick opposed by author for two reasons—*Australorbis* is in more general use than *Biomphalaria* and the prior name of the composite genus is *Planorbina*, **Baker, H. B., (2)**; *B. madagascariensis* as an intermediate host of *Schistosoma mansoni* in Madagascar, **Capron & Brygoo**; *B. pfeifferi nairobiensis* exposed to a new molluscicide in East African trials, **Foster, Teesdale & Poulton**; *Biomphalaria* in Lake Kivu and it's survival at different depths, **Gillet, Braunax & Wolfs**; *B. a.* [?] *pfeifferi* discovery of breeding places in Stanelyville, the Congo, **Lassance, M.**; *B. sudanica rugosa* **subsp. nov.** p. 566, pl. 1a, fig. 2a; Luimbe near Kapalala, N. Rhodesia, **Mandahl-Barth, G.**; *B. pfeifferi* vector of bilharziasis in Mozambique, *B.* (*Pyrgophysa*) *forskalii* present but not a vector, **Morais, T. de**; *B. alexandrina stanleyi* carrier of *Schistosoma* in Lake Kivu, **Meyus, Clerx & Evens**; *B. alexandrina* in the Egyptian High Dam district, **Schalie, H. v. d. (1)**; *B. pfeifferi* internal anatomy, **Schutte and van Eeden**; *B. pfeifferi* capability to survive dry conditions, **Shiff, C. J.**; *B. pfeifferi nairobiensis* seasonal fluctuations in numbers in N. Tanganyika, **Webbe, G.**

Bulimnea megasoma chromosome studies, n = 18, **Burch, J. B. (2).**

Bulinus (*Physopsis*) *ugandae*, *B. truncatus* chromosome study x = 36, probably a tetraploid, **Burch, J. B. (3)**; *B. liratus* as an intermediate host of *Schistosoma* in Madagascar, **Capron & Brygoo**; *B. mariei* cercarial infestation of bilharzia in Madagascar, **Capron & Lartigue**; *B. truncatus* transport and laboratory culture, **Claugher, D.**; *B. tropicus* exposed to a new molluscicide in East African trials, **Foster, Teesdale & Poulton**; *B.* (*Parancrita*) *alberti*, *B. coulboisi* carriers of *Schistosoma* in Lake Kivu, **Meyus, Clerx & Evens**; *B.* (*Physopsis*) *nasutus productus* **subsp. nov.** p. 568, pl. II, C. D.; Western Kenya, and Uganda; *B.* (*Bulinus*) *tropicus toroensis* **nom. nov.** p. 568 for *B.* (*B.*) *t. mutandaensis* Preston, Toro, Uganda, **Mandahl-Barth, G.**; *B.* (*Physopis*) *globosus*, and *B.* (*P.*) *africanus* snail vectors of bilharziasis in Mozambique, the former being most widely responsible, **Morais, T. de**; *B. truncatus* laboratory maintenance, **Najarian, H. H.**; *B.* (*Physopsis*) *globosus* capability to survive dry conditions, **Shiff, C. J.**; *B. forskalii* crowding in laboratory colonies, **Wright, C. A. (1).**

†*Carinulorbis utahensis* **sp. nov.** p. 38, pl. 3, figs. 23–26; L. Flagstaff beds, Paleocene; Musinia Peak, Gunnison Plateau, Utah, **La Rocque, A. (1).**

Chilina robustior evolution of the genital system, **Duncan, C. J. (2).**

Drepanotrema cultratum labrosum 1,000 collected from Texas, **Branson, B. A.**; *D. surinamense* described and considered as a senior synonym of *D. hoffmani*, **Paraense & Deslandes.**

Ferrissia parallela, chromosome studies, n = 30, **Burch, J. B. (2)**; *F. parallela* and *F. tarda* from Michigan, chromosome numbers, n = 30, **Burch, Basch & Bush.**

Fossaria parva, n = 18, *F. modicella*, n = 18, and *F. m. rustica*, n = 19, chromosome studies, **Burch, J. B. (2).**

Galba truncatula and fascioliasis in the River Barycz basin, **Bednarz, S.**; *G. truncatula*, intermediate host of *Fasciola hepatica*, laboratory and field tests of a molluscicide NaPCP, **Enigk & Dûwel**; *G. truncatula* abundance in certain pH values of water in Slovakia, **Kašťák, V.**

Gyraulus circumstriatus on the chromosomes, **Anon, (1)**; *G. arizonensis* from Sinton, San Patricio Co., Texas, **Branson, B. A.**; *G. deflectus*, n = 18, *G. circumstriatus* n = 18, 18 +, 36, 2n = 36, 36+ and ca. 72: chromosome, studies, **Burch, J. B. (2)**; *G. circumstriatus* chromosomal study, **Burch, J. B. (4)**; *G. acronicus* from Bohemia, Czechoslovakia, **Ložek, V. (2)**; *G. natalensis* vector of *Schistosoma mansoni* in Lake Kivu, **Meyus, Clerx & Evens**; *G. costulatus* found not to be a vector of bilharziasis in Mozambique, **Morais, T. de.**

†*Gyraulus albus* of Quaternary age from Obodnoye, Ukraine, **Shovkoplyas, V. N.**

Helisoma anceps and *H. trivolvis*, chromosome studies, n = 18, **Burch, J. B. (2)**; *H. trivolvis* with a parasitic nematode, **Chernin, Michelson et. al.**

Laevapex fusca chromosome studies, n = 17, **Burch, J. B. (2)**; *L. fuscus* from Virginia chromosome number, n = 17, **Burch, Basch & Bush.**

Lentorbis junodi found to be not a bilharziasis vector in Mozambique, **Morais, T. de.**

Lymnaea stagnalis reproductive system, **Alaphilippe & Regondaud**; *L. stagnalis jugularis* chromosome studies, n = 18, **Burch, J. B. (2)**; *L. truncatula* new addition to list of Marken Is. immigrants, **Butot, L. J. M. (2)**; *L. hovarum* as an host of *Schistosoma* in Madagascar, **Capron & Brygoo**; *L. peregra* male and female genital systems, **Duncan, C. J. (1)**; *L. stagnalis* pinocytosis in the developing egg, **Elbers & Bluemink**; *L. natalensis* exposed to a new molluscicide in East African trials, **Foster, Teesdale & Poulton**; *L. truncatula* host of *Fasciola hepatica* in Turkey; *L. pereger* not a host carrier even when exposed to infection, **Gûralp & Simms (1)**; *L. stagnalis* effects of ganglion—extirpations, **Hekstra & Lever**; *L. stagnalis* ciliary action and locomotion, **Kaiser, P.**; *L. ollula* electron microscope study of the shell gland cells in the embryo, **Kubota, T.**; *L. palustris* from Czechoslovakia, **Ložek, V. (2)**; *L. pereger* genital organs, **Macan & Cooper**; *L. stagnalis* the " Golgi apparatus " during development, **Malhotra, S. K.**; *L. natalensis* vector of *Schistosoma* in Lake Kivu, **Meyus, Clerx & Evens**; *L. natalensis* not a vector of bilharziasis in Mozambique, **Morais, T. de**; *L. palustris* development of isolated blastomeres, **Morrill & Gottesman**; *L. natalensis* capability to survive dry conditions, **Shiff, C. J.**

Lymnaeidae chromosome morphology, **Burch, J. B. (1).**

†*Parapholyx durhami* **sp. nov.** p. 1209, text-figs. 1a–1d; Pliocene, San Mateo County, California, **Glen, W. (2).**

" *Pettancylus* " *australicus* note on topographic morphology, **Hubendick, B. (1).**

†*Phreatomenetus* **subgen. nov.** p. 60, of *Promenetus* type sp. *Promenetus umbilicatellus* p. 60, Oklahoma, Cenozoic, **Taylor, D. W. (2).**

Physa acuta in the fauna of Azerbaidjan, **Aliev, A. D. (1)**; *P. sayii crassa*, *P. heterostropha*, *P. gyrina* and *P. anatina*, chromosome studies, n = 18, **Burch, J. B. (2)**; *P. gyrina* Say, on the chromosomes, figs., **Burch, & Bush**; *P. mexicana* parasitized by cercariae from Mexico, **Caballero y C., Garcia-Torres, & Flores-Barroeta**; *P. pomilia* initiation of oviposition, **Dewitt & Sloan**; *P. fontinalis* genital system, **Duncan, C. J. (1)**; *P. heterostropha* carbonic anhydrase and shell growth, **Freeman, J. A.**; *P. acuta* ciliated epithelium in locomotion, **Kaiser, P.**; *P. sayii* intermediate host for the turtle lung fluke, **Ulmer, M. J.**; *P. humerosa* radula fig., **Ward & Whipple.**

Physidae chromosome morphology, **Burch, J. B. (1).**

Planorbarius corneus the male and female genital systems, **Duncan, C. J. (1).**

Planorbidae chromosome morphology, **Burch, J. B. (1).**

†Planorbidae from the Pleistocene of South Dakota, **Hamill, R.**

Planorbina is the prior name for the composite genus *Australorbis—Biomphalaria—Taphius*, history of *Planorbina* given by author in defence of his opposition to Hubendick's proposal that *Biomphalaria* Preston be validated, **Baker, H. B. (2)**; *P.* (*Obstructio*) *obstructa* 500 collected from Texas and 500 *P.* (*Tropicorbis*) *orbiculus*, **Branson, B. A.**; *P. glabrata olivaceus* and *P. sudanica* chromosome study x = 18, **Burch, J. B. (3).**

Planorbis (*Planorbarius*) *corneus* reproductive system, **Alaphilippe & Regondaud**; *P. vortex* new addition to the fauna of Marken Island, **Butot, L. J. M. (2)**; *P. subangulatus* development of eggs in freshwater, **Cassará, A.**; *P. boissyi* transport and laboratory culture, **Claugher, D.**; *P. corneus* oxygen equilibrium work, **Gratzer & Allison**; *P.* (*Anisus*) *vorticulus* Troschel in the Thames Valley at Staines (Shortwood Pond), **Kerney & May**; *P. kivuensis*, *P. pfeifferi* carriers of *Schistosoma* in Lake Kivu, **Meyus, Clerx & Evens.**

†*Planorbis* (*Coretus*) *villatoyensis* p. 36, pl. 9, figs. 3a–c; Pliocene, Rio Cabriel; *P.* (*C.*) *romani* p. 38, pl. 5, figs. 10a–c; Meotian, Concud 1,100 m. *P.* (*C.*) *royoi* p. 40, pl. 5, figs. 11a–c, 12a–c, 13a–c, 14a–c; Teruel, **spp. nov.** *P.* (*C.*) *alcalensis* " **sp. nov.** premutation, species and mutation *atrophius* **nov.**" p. 40, pl. 6, figs. 1a–c—4a–c; 9a–c; pl. 7, figs. 1a–c—7a–c; Pliocene, Alcala del Júcar; *P.* (*C.*) *belnensis* " premutation, species and mutation *senilis* **nov.**" p. 42, pl. 8, figs. 1a–c—8a–c; pl. 9, figs. 1, 2a–c; Pliocene, Rio Cabriel; Spain, **Jodot, P.**

Planorbula crassilabris chromosome studies, n = 19, **Burch, J. B. (2).**

†*Planorbula vulcanata* from the Pleistocene of Nebraska, **Frankel, L.**

Promenetus exacuous chromosome studies n = 19, **Burch, J. B. (2).**

Radix auricularia in the molluscan fauna of Azerbaidjan, **Aliev, A. D. (1)**; *R. pereger*, chromosome studies, 2n = 34, **Burch, J. B. (2).**

Rhodacmea cahawbensis Walker, Anatomy, figs., **Basch, P. F.**; *R. cahawbensis* from Alabama, Chromosome number, n = 15, **Burch, Basch & Bush.**

Stagnicola exilis, *S. lanceata*, *S. reflexa*, *S. umbrosa*, *S. palustris*, *S.p. elodes*, *S. p. desidiosa*, *S. catascopium*, *S. emarginata serrata* and *S. caperata*, chromosome studies, n = 18, **Burch, J. B. (2).**

Texadina sphinctostoma collected from Texas, **Branson, B. A.**

STYLOMMATOPHORA

Stylommatophora chromosomal study, **Natarajan, R. (2).**

VAGINULACEA

Laevicaulis alte cytoplasmic passage and protein metabolism in nerve cells, **Quattrini, D. (1).**

Semperula maculata reproductive system, **Kenny & Inamdar.**

Vaginulus borellianus cytoplasmic passage and protein metabolism in nerve cells, **Quattrini, D. (1).**

SUCCINEACEA

Catinella (*Mediappendix*) *hubrichti* p. 9, fig. 1; A–E; pl. 1, F. Pocomoke River WSW edge of Snow Hill, Worcester Co., *C.* (*M.*) *pinicola* p. 11, fig. 1, F–K; pl. 1, C–E. Pocomoke River, Worcester Co., and Royal Oak Wicomico Co., **spp. nov.** Maryland, also notes on *C.* (*M.*) *vermeta* and figs., **Grimm, F. W.**

Mediappendix vagans circumstances of coitus, **Lee, C. B.**

Oxyloma retusa described from Kansas, **Miles, C. D.**

Quickella vagans and *Q. wandae* described from Kansas, **Miles, C. D.**

Succinea elegans new record for the fauna of Marken Island, **Butot, L. J. M. (2)**; *S. pfeifferi* position in the pulmonate genital system evolutionary scheme, **Duncan, C. J. (2)**; *S. putris* and *S. pfeifferi* mode of life, **Frömming, E. (5)**; *S. putris* parasitized by *Leucochloridum paradoxum* figs., **Honer, M. R. (1)**; *S. pyrites* **sp. nov.** p. 113, Cape May, New Jersey, N. America (= *S. aurea* cited as such by Pilsbry in Land Moll. N. Amer. 2. 815–818, f. 441a, b., 442), **Hubricht, L. (5)**; *S. ovalis*, *S. concordialis*, *S. vaginacontorta* and *S. pseudavara* described from Kansas, **Miles, C. D.**

†Succineidae from the Pleistocene of South Dakota, **Hamill, R.**

VERTIGINACEA

Acanthinula aculeata from grazed and ungrazed grassland in Tiree, Argyll, **Boyd, J. M.**

†*Acicula dilvviana* new to Britain, Interglacial tufa deposits near Hitchin, Herts, **Kerney, M. P.**

Argna (*Agardhiella*) *bureši* **sp. nov.** p. 65, text–fig. 4; Lakatnik near Sofia, Bulgaria, **Urbański, J. (2).**

Azeca (*Azeca*) *menkeana* (C. Pfeiffer) fig. and radula fig. S.E. Dolomites, synonymous with *Azeca goodalli* (Ferussac), **Venmans, L. A. W. C.**

Chondrina (*Modicella*) *farinesi soleri* **form. nov.** p. 12, Barcelona, *C.* (*M.*) *jumillensis unidentata* **form. nov.** p. 12, Tarragona, Spain, **Altimira, C.**

Clausilia dubia variation in Austrian forms; *C. d. hüttneri* p. 89 pl. 10, f. 5, Springelsteig; *C.d.bucculenta* p. 100, pl. 10a, f. 13, Innerschildgraben; *C. d. moldanubica* p. 103, pl. 10a, f. 15, Ruine Aggstein; *C.d. kaufeli* p. 105, pl. 10, f. 16, Kleinschwab; **subspp. nov.** Austria, **Klemm, W. (1).**

Cochlicopa lubrica numbers from grazed and ungrazed grassland in Tiree, Argyll, **Boyd, J. M.**; *C. riograndensis* Pilsbry and Ferriss, living in Independent Creek, Texas; figs., with radula pl. 13, figs. 2–4; **Leonard & Ho (1).**

Cochlodina cerata opaviensis **subsp. nov.** p. 489, from the rivers Moravice and Odra Poland (Silesia), **Brabenec & Mácha.**

Columella edentula Drap. in West Sussex, **Goodchild, M.**

Delima (*Delima* [*Heteroptycha*]) *stankovići* **sp. nov.** p. 51, text-fig. 1; pl. 1; Southern shore of Lake Ochrid, **Urbański, J. (3)**; *D.* (*Alpidelima*) *ornata* protection necessary in Poland, **Wiktor, A. (2).**

Fusulus interruptus from Sagron new to the fauna of the Dolomites (new also to Italy because previous records were only from Styria, Carinthia and North Croatia) fig., **Venmans, L. A. W. C.**

Gastrocopta (*Immersidens*) *hummelincki* **sp. nov.** p. 14; pl. V J–N; text-fig. 2; Basa del Piache, S.E. of El Valle, Margarita Island, Venezuela, **Haas, F.**

†*Gastrocopta franzenae* p. 67, pl. 1, fig. 29; Upper Pliocene, S. High Plains; *G. scaevoscala* p. 70, pl. 1, figs. 33, 34; Late Pliocene and Early Pleistocene, S. Kansas; **spp. nov., Taylor, D. W. (2).**

†*Graciliaria* (*Ruthenica*) *filograna* first record for Britain Pleistocene, Hitchin, Herts., **Kerney, M. P.**

Gyliotrachela saxicola **sp. nov.** p. 14, fig. 1, Limestone Hill, near Kampong Tebing Tinggi, N. of Kangar Perlis, Malaya, **Jutting, W. S. S. v. B. (1).**

Iphigena lineolata Held, around the Baltic coasts, map, **Schlesch & Jaeckel.**

Laciniaria (*Pseudalinda*) *riloensis* distribution in northern Moravia, **Hudec, Ložek & Mácha**; *L.* (*Alinda*) *biplicata euptychia* p. 118, pl. 1, fig. 3; Rila Mountains; *L.* (*A.*) *b. reducta* p. 119, text–fig. 3; pl. 1, fig. 1; Sofia; **subspp. nov., Urbański, J. (4).**

†*Laminifera* (*Neniatlanta*) aff. *pauli* first record for Britain, Pleistocene Hitchin, Herts., **Kerney, M. P.**

Marpessa laminata (Mont.) early breeding, **Stratton, L. W. (2).**

Nesopupa draconis **sp. nov.** p. 6, pl. 2, f. 3, f. 2, Bach Long Vi (Nightingale) Island, Gulf of Tongking, S. China Sea, **Saurin, E.**

Orcula (*Orcula*) *zilchi* **sp. nov.** p. 57, text–fig. 1; RopotamoMündung near Burgas, Bulgaria, **Urbański, J. (2)**; *O.* (*Orculella*) *brandti* **sp. nov.** El Atrun Cyrenaica, p. 59 pl. 9, f. 3; **Zilch, A. (1).**

Pagodulina pagodula, new to Poland, Shell, radula and jaw, and genital apparatus described, and figured, **Jackiewicz & Rafalski.**

Papillifera bidens asymmetrical structure of parietal ganglia, **Quattrini, D. (2).**

Paramastus kuiperi **sp. nov.** Wadi Zaza and Wadi Gseier, Cyrenaica, p. 59, pl. 9, f. 4, 5, **Zilch, A. (1).**

Peruinia flachi saperba **subsp. nov.** Peru, p. 24, pl. 3, f. 1–3, **Weyrauch, W. K. (3).**

Pseudalinda (*Pseudalinda*) *rhodoparum* **sp. nov.** p. 128, text-figs. 7, 8; pl. 1, fig. 2; Bačkovski near R. Plovdiv, Bulgaria, **Urbański, J. (4).**

Pupilla (s.s.) *muscorum luxurata* **form. nov.** p. 12, text–fig. 3; Casa Antúnez, Spain, **Altimira, C.**; *P. bogdanovi* p. 61, text-fig. 2; *P. valkanovi* p. 63, text-fig. 3; **spp. nov.** Burgas, Bulgaria, **Urbański, J. (2)**; *P. alpicola* from Slovakia, Czechoslovakia, **Ložek, V. (2).**

Pupisoma latens p. 26, figs. 3–6; *P. puella* p. 29, figs. 7–9; **spp. nov.** Argentina, **Scott, M. I. H. (2).**

Pupoides inornatus Vanatta in Larimer Co., Colorado, **Beetle, D. E. (2)**; *P. (Ischnopupoides) minimus costatus* **subsp. nov.** Prov. Antofagasta, 30 km. n. Paposo Chile, **Biese, W. A.,**: 135, pl. 13 f. 5; *P. (Pupoides) albilabris peruvianus* **subsp. nov.** p. 117, pl. 11, f. 1, 2; Peru, **Weyrauch, W. K. (2).**

Pyramidula gracilitesta **sp. nov.** p. 124, pl. 1 fig. 7, Hanna Estate, East Coast, Sumatra, **Jutting, W. S. S. v. B.,** Beaufortia **7** (83) 1959. [Omitted from Z.R. 1959].

Temesa (*Temesa*) *pilsbryi shutcoënsis* p. 119, pl. 11, fig. 6; *T.* (*T.*) *p. laraosensis* p. 119, pl. 11, fig. 7; *T.* (*T.*) *p. primigenia* p. 120, pl. 11, fig. 8; **subspp. nov.** Peru, **Weyrauch, W. K. (2).**

Truncatellina klemmi p. 57, pl. 9, f. 1, *T. brandti* p. 58, pl. 9, f. 2; **spp. nov.** Cyrenaica, **Zilch, A. (1).**

Vallonia perspectiva Sterki, occurrence in Maryland, **Jackson, R. W.**

Vertigo antivertigo Drap. in West Sussex, **Goodchild, M.**; *V. alpestris* Alder in Denmark, **Zeissler, H. (3).**

†*Vertigo* (*Angustula*) *hibbardi* Baker 1938 transferred to *Vertigo* s.s.; *Angustula* Sterki 1888, subgenus considered of minor rank and synonymized with *Vertigo* s.s., **Taylor, D. W. (2).**

ACHATINACEA

Achatina fulica modifications of the excretory system in correlation with habit, **Ghose, K. C. (1)**; *A. fulica* histology of the heart and pericardium, **Ghose, K. C. (2)**; *A. fulica* pace-maker mechanism and re-filling of the auricle, **Ghose, K. C. (3)**; *A. fulica* origin and development of the mesoderm, **Ghose, K. C. (4)**; *A. fulica* and *A. tincta* studied as giant snails, **Gijzen, A.**; *A. marginata* reproduction and self fertilization, **Larambergue, M. de**; *A. fulica* protease and amylase production in young and mature snails, **Smith & Weel.**

Archachatina (*Calacathina*) *marginata* reproduction, **Larambergue & Alaphilippe.**

Caecilioides acicula general study from Sweden, **Walden, H. W.**

Limicolaria flammea habits and mode of life from West Africa, **Frömming, E. (1).**

Limicolariopsis **sp. nov. nom. nud.** p. 239; Kenya, Northern Frontier Province, Malca Murri; **Verdcourt, B. (10).**

Tristania costellata p. 171 pl. 10, f. 4, 11, pl. 11, f. 24; *T. costigera* p. 171, pl. 11, f. 23 Inaccessible Island; *T. goughensis* p. 172, pl. 10, f. 15, Gough Island; *T. flavida* p. 172, pl. 10, f. 12, 13, Gough Island; **spp. nov.** *Tristania tristensis* f. *intermedia* p. 170, pl. 10, f. 3, pl. 11, f. 20, 28, Nightingale and Inaccessible Islands; *T. t. smithi* p. 170, pl. 10, f. 8, pl. 11, f. 16, Tristan Island; *T. t. angiostoma* p. 170, pl. 11, f. 17–19, Nightingale Island; *T. ventricosa* Gray *levior* p. 171, pl. 11, f. 25, 26; **forma. nov. Odhner, N. H.**

OLEACINACEA

Euglandina singleyana used as food on "Williams Site" ranges from Llano River S. to Nuevo Leon, Mexico, **Suhm, D. A.**; *E. altispira* **sp. nov.** Peru, p. 25, pl. 4, f. 21, **Weyrauch, W. K. (3).**

ZONITACEA

Agriolimax reticulatus breeding seasons of slugs in gardens, **Bett, J. A.**; *A. reticulatus* as a vector of *Cystocaulus ocreatus*, **Rose, J. H.**; *A. laevis andicolus* (Orb.) in Nairobi, Kenya, **Verdcourt, B. (8).**

Allodiscus tullia (Gray) riblet frequency as a taxonomic character, **Cumber, R. A.**

Andrefrancia **gen. nov.** p. 2, of Endodontidae type. sp. *Helix rhizophorarum, A. cockerelli* **sp. nov.** p. 2, figs. 4–7; Bourail, New Caledonia, **Solem, A. (5).**

Arion hortensis, A. subfuscus breeding seasons of slugs in gardens, **Bett, J. A.**; *A. rufus* neurosecretion of cerebral ganglia, **Mol, J. J. van**; *A. subfuscus* low temperature effect on ascorbic acid content of ovotestis, **Pelluet, D.**

Boettgerilla vermiformis a full description from Lower Silesia, **Wiktor, A. (3).**

Cavellia biconcava riblet frequency as a taxonomic character, **Cumber, R. A.**

Charopa coma riblet frequency as a taxonomic character **Cumber, R. A.**

Daudebardia dobrogica p. 174, text-figs. 1, 2; *D. spelaea* p. 176, text–figs. 3, 4; **spp. nov.** Dobrogia and S.W. Carpathians, Roumania, **Grossu, A. V. (2).**

Deroceras caruanae general study from Sweden, **Walden, H. W.**: *D. reticulatum* nuptial dance and copulation, **Wiktor, A. (1)**; *D. reticulatum* effect of visible light on the ovotestis, **Henderson & Pelluet.**

Echinophallus **subgen. nov.** p. 334, of *Lindbergia; L.* (*L.*) *pseudoillyrica* p. 335, figs. 1–3; 6, 7, 8, *L.* (*E.*) *umiñskii* p. 339, figs. 9–11; 13, 14, 15, 16, 17; **spp. nov.** Bulgaria, **Riedel, A. (2).**

Eopolita forcarti genitalia fig'd, *E. protensa jebusitica* genitalia and shell fig'd; *E.p.protensa* shell fig'd.; *E. tenerrima* and *E. derbentina* discussed, **Forcart, L. (1).**

Fectola tapirina riblet frequency as a taxonomic character, **Cumber, R. A.**

Limax maximus traces of copula on beech and oak trees at Oegstgeest near Leiden, **Altena, C. O. v R. (1)**; *L.* (*Limax*) *maximus altenai* **subsp. nov.** p. 160, text–fig. 2; Bucarest *L.* (*L.*) *zilchi* **sp. nov.** p. 161, text–fig. 4 *L.* (*L.*) *dobrogicus* **sp. nov.** p. 162, text–fig. 5, Roumania, **Grossu & Lupu**; *L. cinereo-niger* and *L. flavus* cytoplasmic passage and protein metabolism in nerve cells, **Quattrini, D. (1)**; *L.* (*Lehmannia*) *poirieri* Mabille near Reading, **Quick, H. E. (2)**; *L. maximus* and *L.* (*Lehmannia*) *valentianus* general study from Sweden, **Walden, H. W.**; *L. maximus* isolation of uridine diphosphate-glycosyl compounds, **Wheat, R. W.**

Lindbergia (*Echinophallus*) **subgen. nov.** q.v., **Riedel, A. (2).**

Megomphix californicus **sp. nov.** p. 1, figs. 1–3; Natural Bridge Cave, Trinity County, California, **Smith, A. G. (5).**

Meledella werneri general study of the anatomy, **Riedel, A. (1).**

Milax budapestensis and *M. sowerbii* breeding seasons in gardens, **Bett, J. A.**; *M. barypa* Bourg., systematic position, **Forcart, L. (3)**; *M. gagates* passage at microscopical level of cytoplasm in central nervous system nuclei, **Quattrini, D. (1).**

†*Milax biroti* **sp. nov.** p. 13, pl. 1, figs. 1a, b; 12 km. from Almansa Spain, Quaternary, **Jodot, P.**

Mocella kuntzi **sp. nov.** p. 41, pl. 5A, figs. 1–3; East of Halavo, Florida Is., Solomon Islands, **Solem, A. (1).**

Nesovitrea (*Perpolita*) *petronella* (Pfr.) synonymous with *N.* (*P.*) *hammonis* (Strom) ?, **Forcart, L. (4).**

Ozychilus alliarius on grazed and absent from ungrazed grassland in Tiree, Argyll, **Boyd, J. M.**; *O. cellarius*, a cave dwelling snail feeding on living Lepidoptera, also producing a substance preventing fungi forming on the Lepidoptera whilst they are being eaten, **Tercafs, R. R. (2)**; *O. draparnaudi* general study from Sweden, **Walden, H. W.**

Pallifera (*Pancalyptus*) *pilsbryi* **sp. nov.** p. 76 (Oct. 1960) pl. 5 (Jan. 1961) conspecific with? *Philomycus* (*Pallifera*) *arizonensis* Pilsbry 1917 Naut. **30** : 119, 1948; Mon. Land Moll. N. America **2** (2) : 770, Bear Wallow, Santa Catalina Mts., *Pallifera pilsbryi santaritana* **subsp. nov.** p. 78; Madera Canyon, Santa Rita Mts., Santa Cruz Co., Arizona, **Miles & Mead.**

Parmacella occurrence in the U.S.S.R., **Eberxin, A. G. (1).**

Phenacohelix ponsonbyi riblet frequency as a taxonomic character, **Cumber, R. A.**

†*Polygyra* (*Erymodon*) *rexroadensis* **sp. nov.** p. 82, pl. 1, figs. 17, 23; pl. 2, figs. 4, 5; Late Pliocene, S.W. Kansas, **Taylor, D. W. (2).**

Praticollela berlandieriana today occurs in the lower Sonoran zone in Texas, Nuevo Leon and Tamaulipas extending into Oklahoma, Arkansas and Louisiana, mainly in upper levels of the " Williams Site," **Suhm, D. A.**

Ptychodon kunuaensis riblet frequency as a taxonomic character, **Cumber, R. A.**

Retinella anatomy; *R.* (*Retinella*) *hiulca* and *R.* (*R.*) *tetuanensis* genital apparatus and shells fig'd; *R.* (*R.*) *olivetorum*, *R.* (*R.*) *incerta*, and *R.* (*Lyrodiscus*) *circumsessa*, shells fig'd, **Forcart, L. (1).**

Suteria ide riblet frequency as a taxonomic character, **Cumber, R. A.**

Systrophia (*Systrophia*) *hassi* **sp. nov.** N. Peru, p. 28, pl. 3, f. 7, **Weyrauch, W. K. (3).**

Vitrea illyrica discussed with the new species of *Lindbergia* from Bulgaria., **Riedel, A. (2).**

Vitrina pellucida numbers from grazed and ungrazed grassland in Tiree, Argyll, **Boyd, J. M.**

Zaphysema (*Zaphysema*) *gaussoini* and *Z.* (*Z.*) *tenerrima* from Navassa Island, W. Indies, **Turner, R. D. (2).**

Zilchistrophia **gen. nov.** p. 26, Corillidae, genotype: *Z. tridentata* **sp. nov.** p. 27, pl. 3, f. 6, central Peru; genus also to include *Systrophia obvoluta* Haas, and *S. angigyra* Haas; **Weyrauch, W. K. (3).**

Zonitoides arboreus general study from Sweden, **Walden, H. W.**

†*Zonitoides solei* **sp. nov.** p. 13, pl. 1, figs. 2a–c; Concud 1,050 m. Spain, Pontian Miocene, **Jodot, P.**

ARIOPHANTACEA

Ariophanta sp. effect of ribonuclease on shell regeneration, **Nair & Muthe**; *A. semirugata*, *A. ligulata* and *A. bistrialis* chromosome study, **Natarajan, R. (1).**

Atoxon kiboense **sp. nov.** p. 205, fig. 3; Mt. Marsabit, Kenya, **Verdcourt, B. (1).**

†*Bloyetia* **sp. nov** ? near *plicatula* (Von Martens) or *nyiroensis* (Preston) p. 244; Lodwar, Kenya, Pleistocene age?, **Verdcourt, B. (10).**

Bukobia kikuyuense **sp. nov.** p. 106 pl. 6a–b; text–figs. 1–9; Muguga Kiambu District (Nairobi) Kenya, **Urban, S.**

Helicarionidae of East Africa generic relationships, **Verdcourt, B. (6).**

Orpiella kuntzi **sp. nov.** p. 45, pl. 5b figs. 1–3; Halavo, Florida Is., Solomon Islands, **Solem, A. (1).**

Sitala iredalei Preston 1912, list of related species, *S. inflatior* probably one of other MS. names of Preston, **Verdcourt, B. (6).**

Thapsia Albers 1861, catalogue of species, taxonomy, **Adam, W. (5)**; *T. rumrutiensis* Preston 1911 probably = *Guppya rumrutiensis* (Preston 1911), **Verdcourt, B. (6).**

Trochozonites (*Trochozonites*) *annobonensis* **sp. nov.** p. 99; text–fig. 6, Annobon, **Zarate & Alvarez.**

Urocyclus variabilis **sp. nov.** p. 238, fig. 8; Kenya, Kwale District, Marenji Forest near Mrima, **Verdcourt, B. (2).**

Yamatochlamys kiiensis **sp. nov.** Tado, near Dorokyo Kii Prov. Wakayama Prefecture, Japan, pp. 6, 9, text, figs., 1 and 2, **Azuma, M.**

ACAVACEA

Strophocheilus rosaceus cell bodies in the central nervous system. **Haeckel, W.**; *S.* (*Megolobulimus*) *lichtenstein* Albers distribution and synonymy, **Pain, T. (1).**

Stylodon unidentata globata with a nematode parasitic in the pulmonary cavity, **Turner & Pini.**

BULIMULACEA

Bostryx (*Bostryx*) *pygmaeus* p. 121, pl. 11, f. 10, 11; *B.* (*Peronaeus*) *agueroi* p. 126, pl. 12, f. 39–41; *B.* (*Pseudoperonaeus*) *cylindricus* p. 127, pl. 11, f. 3; . *B*(*P.*) *longispira* p. 128, pl. 11, f. 4.5; **spp. nov.**, *Bostryx* (*Bostryx*) *pygmaeus costatus* p. 122, pl. 11, f. 12, 16; *B.* (*B.*) *obliquiportus angispira* p. 123 pl. 11, f. 19, *B.* (*B.*) *o. inflatiportus* p. 123, pl. 12, f .22–26; *B.* (*B.*) *o. laraosensis* p. 124, pl. 11, f. 20, 21; *B.* (*B.*) *zilchi glomeratus* p. 124, pl. 12, f. 29–34; *B.* (*B.*) *z. compactus* p. 125, pl. 12, f. 27, 28 : *B.* (*Elatibostryx*) *imeldae costifer* p. 129, pl. 12, f. 35–38 : **subspp. nov.** Peru **Weyrauch, W. K. (2)**; *Bostryx* (*Bostryx*) *chusgonensis* p. 30, pl. 3, f. 16–17; *B.* (*B.*) *vilchezi* p. 32, pl. 3, f. 8–10; *B.* (*B.*) *hassi* p. 33, pl. 5, f. 35, *B.* (*Elatibostryx*) *rehderi* p. 35 ,pl. 3, f. 4.5; **spp. nov.** Peru : *B.* (*B.*) *modestus angelmaldonadoi* p. 31, pl. 3, f. 11, 12; *B.* (*B.*) *haasi minor* p. 35, pl. 5, f. 34 : **subspp. nov.** Peru : **Weyrauch, W. K. (3).**

Bulimulus tenuissimus structural study, **Barros Araujo, J. L. de, et al**; *Bulimulus* spp. Southern Texas, **Hubricht, L. (4)**; *B. dealbatus mooreanus* most common shell from the " Williams Site " probably used for food, **Suhm, D. A.**

Eudolichotus glabra paraguanensis **subsp. nov.** p. 419, pl. 1, figs. 4–6; Pico Santa Ana, Falcon, Venezuela, **Solem, A. (2)**

Liguus fasciatus vonpaulseni **subsp. nov.** p. 261, figs. 1, 2; Little Torch Key, Monroe County, Florida, **Young, F. N.**

Naesiotus silvaevagus p. 36, pl. 4, f. 20; *N.* (*Naesiotus*) *bambamarcaensis* p. 37, pl. 6, f. 38: **spp. nov.** Peru, **Weyrauch, W. K. (3).**

Newboldius angiportus **sp. nov.** p. 53, pl. 8, f. 5–6, central Peru; *N. crichtoni* (Broderip) shell fig'd, pl. 7, **Weyrauch, W. K. (1).**

Scutalus grandiventris **sp. nov.** Peru, p. 42, pl. 5, f. 27–33, **Weyrauch, W. K. (3).**

Thaumastus (*Thaumastiella*) *occidentalis* **sp. nov.** p. 28, pl. 3, f. 13–14; *T.* (*Thaumastiella*) *o. debilisculptus* **subsp. nov.** p. 30, pl. 3, f. 15; Peru, **Weyrauch, W. K. (3).**

HELICACEA

Arianta arbustorum influence of temperature on respiratory metabolism, **Gromadska & Przybylska.**

Bradybaena similaris (Fér.) occurrence in Mississippi and Alabama, **Hubricht, L. (3).**

Cepaea nemoralis genetics of polymorphism, **Cain, King & Sheppard;** *C. hortensis* and *C. nemoralis* divergent effects of natural selection, **Clarke, B.;** *C. nemoralis* (L.) occurrence in Rhode Island, **Clench, W. J. (4);** *C. nemoralis* habitat in N.W. Ireland, population study, variation in color, banding and open umbilicus, **Cook & Peake;** *C. nemoralis* nucleolar structure in oocytes, **Serra, J. A.**

Cochlicella acuta from the wooded Goblin Combe, England, **Bird, H. W.;** *C. ventricosa* influence of climate on hatching, **Boulangé & Hoestlandt;** *C. acuta* numbers from grazed and ungrazed grassland in Tiree, Argyll, **Boyd, J. M.**

†*Cryptomphalus aspereus* fossil bed with other thermohygrophilous species now disappeared from Ventotene but still persisting in the evergreen forests of the Tyrrhenian coast, **Sacchi, C. F. (2).**

Draparnaudia gassiesi microumbilicata **subsp. nov.** p. 6, fig. 8; Bourail, New Caledonia, **Solem, A. (5).**

Eobania vermiculata cytoplasmic passage and protein metabolism in nerve cells, **Quattrini, D. (1);** *E. vermiculata* relation to microclimatic conditions on Ventotene, **Sacchi, C. F. (2).**

Epiphragmophora mirabilis **sp. nov.** Peru, 129, pl. 12, f. 42, **Weyrauch, W. K. (2);** *E. basiplanata* p. 43, pl. 6, f. 39, *E. zilchi* p. 44, pl. 6, f. 41–44, *E. granulosa* p. 46, pl. 6, f. 37, *E.* (*Karlschmidtia*) *cerrateae* p. 47, pl. 6, f. 40, **spp. nov.** *E. diluta semiclausa* p. 45, pl. 6, f. 36, **subsp. nov.** Peru, **Weyrauch, W. K. (3).**

Eremina inexspectata **sp. nov.** p. 67, pl. 2, f. 11–14, Tane-Tane, Spanish Protectorate N. W. of western Sahara; *E. vermiculosa* var. *candida* mss. (in coll.) p. 63, pl. 2, f. 4, albino form; *Eremina* in N. and N.W. Africa, **Llabador, F.**

Euhadra nipponensis calcium intake methods and shell formation studies, **Kado, Y.;** *E. amaliae* and *E. sandai*, cytochrome—like haemoproteins in gut fluids, **Kawai, K. (1);** *E. amaliae* and *E. sandai*, cytochrome 556 and electron-transport system in hepatopancreas, **Kawai, K. (2).**

†*Euparypha pisana* fossil dune associated with a psammicolous fauna of actual type the former being now extinct on Ventotene, **Sacchi, C. F. (2).**

Eustomopsis (*Verdichloritis*) *polingi* Clench on the green colouring matter which is located in the periostracum, **Clench, W. J. (2).**

Helicella (*Xeropicta*) *gyroides* in S. France; *H.* (*X.*) *derbentina homoleuca* in Tholonet, 4 km E of Aix-en-Provence, *Xeropicta* is essentially an eastern-mediterranean subgenus in Cyrenaica, Egypt, Palestine, Syria, Asia Minor, Persia, Turkestan, S.E. Russia, **Altena, C. O. v. R. (2);** *H. itala* numbers on grazed and ungrazed grassland in Tiree, Argyll, **Boyd, J. M.;** *H.* (*Cernuella*) *profuga* conchometry and variations, Italy, **De Joanna & Sacchi;** *H.* (*Helicella*) *bolenensis* (Locard) notes and figures, **Horst, D. v. d.;** *H.* (*Cernuella*) *virgata* (Da Costa) (= *variabilis* Drap.) *pandatariae* **subsp. nov.** p. 370, text-fig. 2b; endemic to Ventotene, W. Mediterranean, **Sacchi, C. F. (2).**

†*Helicella ammonis* fossil level, an Italian species no longer along the S. Tyrrhenian coasts but still inhabiting Apenninian regions and the Po Plain. Its presence indicates colonization by a dry-and-cold-climate fauna of Ventotene, **Sacchi, C. F. (2).**

Helicigona lapicida a new example for the cave dwelling fauna of Belgium, **Tercafs, R. R. (1).**

Helicodonta obvoluta study on the habitat and mode of life, **Frömming, E. (2).**

Helix aspersa, development of two symmetrical penes, **Alaphilippe, Regondaud & Tardy;** *H. aspersa* changes in nuclear histones during fertilization and early embryonic development, **Bloch & Hew (1);** *H. aspersa* schedule of spermotogenesis with reference to histone transition, **Bloch & Hew (2);** *H. pomatia* kidney structure, gross and microscopic, **Bouillon, J. (1);** *H. pomatia* biochemical analysis of nerve ganglia, **Domján & Minker;** *H. aspersa* and *H. pomatia* cytological study in an attempt to obtain polyploids, **Evans, H. J.;** *H. pomatia* lipase activity of the intestinal epithelium, **Ferreri, E.;** *H. pomatia* anatomical study, **Gijzen, A.;** *H. aspersa* partial gonadectomy considered not to affect tissues of the reproductive tract, **Goddard, C. K. (1);** *H. aspersa* physiological saline for tissue work, **Goddard, C. K. (2);** *H. pomatia* cytology and histochemistry of the mantle, **Guardabassi & Piacenza;** *H. pomatia* decrease of the copper bands of haemocyanin, **Heirwegh & Lontie;** *H. aspersa* effect of cold on growth, **Herzberg, F. & A.;** *H. pomatia* fructose consummation by the isolated heart, **Jullien & Cardot;** *H. pomatia* importance of calcium in heart rhythm maintenance, **Jullien, Ripplinger, Joly et al (2);** *H. pomatia* functional aptitude of the isolated heart for mineral solutions, **Jullien, Ripplinger & Joly et al (3);** *H. pomatia* nervous co-ordination of cardiac and respiratory movements, **Jullien, Ripplinger, Joly et al (4);** *H. pomatia* heart inhibition by alkaline substances, **Jullien, Ripplinger & Cardot et al (6);** *H. hortensis* general study with other non marine Mollusca of N.E. Scotland, **McMillan, N. F. (4);** *H. pomatia* effect of acetyl choline on the isolated heart, **Megemont, Dastugue et al.;** *H. pomatia* action of acetylcholine and other choline esters on isolated ventricle, **Megemont, Dastugue & Bastide;** *H. pomatia* control of heart activity, **Meng, K. (1);** *H. pomatia* vascular and nervous physiology, **Meng, K. (2);** *H. pomatia* electron microscope study of digitate glands, **Nolte, A.;** *H. aspersa* cell differentiation in regenerating parts under different atmospheric oxygen conditions, **Pande, B. P.;** *H. aspersa* cytoplasmic passage and protein metabolism in nerve cells, **Quattrini, D. (1);** *H. pomatia* action of mono-, bi-and tricationic solutions on myocardium respiration, **Ripplinger & Hérold (1);** *H. pomatia* effect on respiration of the myocardium of Na^+, K^+ and Ca^{++}, **Ripplinger & Hérold, (2);** *H. pomatia* anaesthetising technique, **Ripplinger & Joly;** *H. pomatia* ion absorption by the isolated heart and ionic relations within the myocardium, **Ripplinger, Joly & Cardot (1);** *H. pomatia* influence of hydration on the ionic content of the haemolymph of the myocardium, **Ripplinger, Joly & Cardot (2);** *H. pomatia* isolated heart in contact with Ringer's solution loses most of its mineral components without any breaking of rhythm, **Ripplinger, Joly & Cardot (3);** *H. pomatia* chromosomal study, **Schlote, F.-W.;** *H. aspersa* nucleolar structure in oocytes, **Serra, J. A.;** *H. aspersa* experiments on isolated hearts, **Stolkowski, Reinberg & Blanc-Dingeon;** *H. pomatia* analysis of haemolymph using the "daphnian test," **Vatovec & Timet;** *H. cincta* development of the hermaphroditic gonad, **Zannini, A. M. (1)** *H. cincta* parasitic atrophy of the gonads, **Zannini, A. M. (2);** *H. cincta*

developmental phases of the hermaphrodite gonad, **Zannini, A. M. (3).**

†*Helix* (*Pseudotachea*) *concudensis* **sp. nov.** p. 22, pl. 4, figs. 1a–c, 2; Concud Meotian; *H.* (*P.*) *tersannensis* **var. nov.** p. 23, pl. 4, figs. 4a–c, 7a–c; Hellin, Pliocene, Spain, **Jodot, P**

Hygromia hispida (L.) at Stromness, Orkney, **Groundwater, W.**; *H. subvirescens* in Pembrokeshire, **Lloyd-Evans, L.**; *H. hispida* (L.) in Hoy, Orkney, **McMillan, N. F. (3)**; *H. liberta* and *H. hispida* living together, R. Thames near Pangbourne, Berkshire, **Quick, H. E. (1)**; *H. subrufescens* (Miller) and *H. subvirescens* (Bellamy) living together at Blackstone Point, South Devon, **Quick, H. E. (3).**

Leptarionta woytkowskii **sp. nov.** Peru, **Weyrauch, W. K.**, : 130 pl. 11, f. 9; **(2).**

†*Leucochroa* (*Albea*) *baetica incrassata* **var. nov.** p. 15, pl. 1, figs. 3a–c, 5 a–c, b; Almansa; *L.* (*A.*) *praemayrani* **sp. nov.** p. 16, pl. 2, figs. 4 a–c, pl. 3, fig. 7; Alhama de Murcie Spain, Quaternary, **Jodot, P.**

Meliobba helenae **sp. nov.** p. 30, pl. 3, Asai-Simbai Divide, Schrader Range, New Guinea, **Clench & Turner (2).**

Monacha cantiana (Montagu) in Fife, **McMillan, N. F. (5).**

Otala vermiculata electron microscope study on gametogenesis, **Gatenby, J. B.**

Trichia villosa ecology and nutrition, **Frömming, E. (4)**; *T. hispida* hirsute shells from a quarry in Schoharie Co., New York State, **Hubricht, L. (7).**

Zachrysia provisoria (Pfr.) occurrence in Florida, possibly introduced with plants, **Clench, W. J. (3).**

Zenobiella rubiginosa study of the mode of life, **Frömming, E. (3).**

STREPTAXACEA

Gonaxis (*Macrogonaxis*) *lamottei* p. 150; pl. 1, figs. 1–6; *G.* (*Pseudogonaxis*) *montisnimbae* p. 151, pl. 1, figs. 7–11; **spp. nov.** Mont Nimba, Guinea, **Binder, E.**; *Gonaxis* **sp. nov.** p. 259; resembling *G. kibweziensis* in shape, Kenya, Mt. Kulal; *Gonaxis* **sp. nov.** p. 259, near *enneoides* (von Martens); Tanganyika, Uluguru Mts.; **Verdcourt, B. (10).**

Gulella (*Huttonella*) *rambhaensis* **sp. nov.** p. 690, text-fig. p. 692; Rambha Bay, Chilka Lake, Ganjam District, Orissa, **Ray, H. C.**

Microphyura nightingali **sp. nov.** p. 7, f. 3, pl. 1, f. 6, 7, Bach Long Vi (Nightingale) Island, Gulf of Tongking, S. China Sea, **Saurin, E.**

Tayloria amaniensis **sp. nov.** p. 167, f. 1–2; East Usambara Mts. Amani, Mts. Bomole, Tanganyika Territory, **Verdcourt, B. (4).**

SCAPHOPODA

Scaphopoda from Afognak and Sitkalidak Islands, Kodiak Group Alaska (List), **Eyerdam, W. J. (2)**; Structure and description of N. African fossils, **Fantinet, D.**; Structure and description of fossil and recent species, **Ludbrook, N. H. (2)**; Systematics and phylogeny, **Muller A. H.**; Structure, descriptions and keys to Danish species, **Muus, B. J.**

†Scaphopoda Types from G. Brocchi's Apennine collection, figs., **Ronchetti, C. R. (2).**

Dentalium occidentale radula fig'd. p. 57, **Muus, B. J.**

†*Dentalium* (*Antalis*) cf. *taurostriata* or **nov. sp.** p. 48, pl. 7, f. 1–6, Algeria, Miocene, Shell structure, p. 59–61 and figs.; *D. inaequale* shell structure, p. 55–59 and figs., **Fantinet, D.**; *D.* (*Fissidentalium*) *watanabei* **sp. nov.** p. 200, pl. 5, figs. 7–9; Shinoha-zawa Obashira, Japan, Miocene, **Kanno, S.**

†*Hensonella* **gen. nov.** p. 229, [probably a much altered scaphopod, not a dasyclad alga as first supposed] type species *H. cylindrica* **sp. nov.** p. 229, pl. 8, fig. 1; lower Cretaceous, Surdash, Sulemania Liwa, Iraq, **Elliott, G. F.**

Siphonodentalium japonicum **sp. nov.** p. 294, type-locality: Tomioka, Amakusa, Kumamoto Pref., **Habe, T. (4)**; *S. lobatum* radula fig'd p. 57, **Muus, B. J.**

†*Siphonodentalium* (*Dischides* ?) *helveticum* Cossmann and Peyrot, or nov. sp. Pliocene and Helvetian, Morocco; p. 52, pl. 9, f. 2–4, **Fantinet, D.**

PELECYPODA

Pelecypoda from Afognak and Sitkalidak Islands, Kodiak Group, Alaska, (List), **Eyerdam, W. J. (2)**; Pelecypoda of the Line Islands, **Jewell, jr. H. G.**; List of some Austrian species with distribution and synonymy notes, **Klemm, W. (3)**; Systematics and phylogeny, **Müller, A. H.**; Catalogue of described and unnamed fossil species and varieties from Morocco, **Colo & Petitot (2)**; Stomach structure and functioning, **Purchon, R. D. (2)**; Types from G. Brocchi's Apennine collection, figs., **Ronchetti, C. R. (3)**; Lithuanian Pelecypoda described and figured, **Sivickis, P.**

NUCULACEA

†*Acila musashiensis* p. 158, pl. 1, figs. 1–2; *A. iwadonozawensis* p. 159, pl. 1, figs. 3–4; **spp. nov.** Iwadonozawa Ogano-machi, Saitama Pref. Japan, Upper Oligocene, **Kanno, S.**; *A.* (*Acila*) *praedivaricata* Nagao and Huzioka, lectotype designated p. 104, **Oyama, Mizuno & Sakamoto.**

†*Allodesma elegantula* **sp. nov.** p. 110, pl. 4, figs. 47–52; Gran Hadeland, Upper Middle Ordovician, Norway, **Soot-Ryen, H. & T.**

†*Anodontophora takiguchiensis* **sp. nov.** p. 214, pl. XII, figs. 14–17; Takiguchi, Hirabara formation West Japan, Triassic, **Tokuyama, A. (2).**

†*Anoplophora solei* **nov. sp.** Vill. et Vir., Triassic, El Farell, Catalonia, Spain, **Virgili, C.**

†*Anthraconaia* (?) *kirki* **sp. nov.** p. 141, pl. 25, figs. 13, 14; Visean Carboniferous, East Fife, Scotland, **Bennison, G. M.**; *A. cuboides* **sp. nov.** p. 172, pl. 1, f. 7, Saur Khrebet, Uidene river, N.E. Kazakhstan, Lower Permian, **Lyutkevich & Lobanova.**

†*Cardiomorpha hindi* **sp. nov.** p. 122, pl. X, figs. 8–9, George Square, Glasgow, Carboniferous, olim *C. limosa* Hind 1898, **Wilson, R. B. (1).**

†*Ctenodonta nuda* p. 86, pl. 1, fig. 1; Furuberget, Hamar, Cyclocrinus beds; *C. spjeldnaesi* p. 87, pl. 1, figs. 3–6; text-fig. 1; Vesthråten, Ringerike; Upper Chasmops Shale; *C. norvegica* p. 90, pl. 1, figs. 7–8; Langåra, Asker, Lower Chasmops limestone; **spp. nov.** Middle Ordovician, Norway, **Soot-Ryen, H. & T.**

†*Cuneamya multistriata* p. 112, pl. 4, figs. 53–54, Røysetangen, Ringerike, *C.* ? *minuta* p. 113, pl. 4, fig. 55, Gran Hadeland; **spp. nov.** Upper Middle Ordovician, Norway, **Soot-Ryen, H. & T.**

†*Edmondia sulcata* (Fleming) lectotype selected and figured, pl. VIII, figs. 1–4a; *E. lyelli* Hind lectotype selected pl. X fig. 10; Carboniferous, **Wilson, R. B. (1).**

†*Ennucla haboroensis* **sp. nov.** p. 41, pl. 4; figs. 1a–b; Tomamae District, Hokkaido, Japan, Sankebetsu formation, Miocene, **Kanno & Matsuno.**

†*Grammysia ampla* p. 361, p.. XIX, fig. 1; Upper Trilobite beds, Bowning; *G. compressa* p. 362, pl XIX, fig. 3; Yass Beds, Yass; **spp. nov.** Silurian, N. S. Wales, **Sherrard, K.**

†*Grammysoidea declivis* **sp. nov.** p. 362, pl. XIX, figs. 2, 15; Bowning, N. S. Wales, Silurian, **Sherrard, K.**

Ledella ultraabyssalis **sp. nov.** nom. nud. p. 138, Kuril Kamchatsk region U.S.S.R., N. Western Pacific, **Filatova, Z. A.**

†*Leionucula shichensis* p. 76, pl. 3, figs. 3a–c, 4; Cretaceous, Hansanji, Shichi; *L. azenotanensis* p. 77, pl. 3, figs. 5 a–b, 6 a–c, 7, 8 a–b; Mitsugawa; **spp. nov.** Awaji Island, Japan, **Ichikawa & Maeda.**

Malletia abyssopolaris **sp. nov.** p. 7, pl. 1, figs. 19–22; Station Alpha, north of Point Barrow, Alaska, **Clarke, A. H. (3).**

†*Malletia leanzai* **sp. nov.** p. 97, pl. 1, fig. 1; River Ewan, Tierra del Fuego Paleocene, **Camacho, H. H.**

Nucula zophos **sp. nov.** p. 5, pl. 1, figs. 15–18; Station Alpha, North of Point Barrow, Alaska, **Clarke, A. H. (3);** *N. proxima* one of the most common species in the benthic fauna of Buzzards Bay Mass. **Sanders, H. L. (2).**

†*Nucula izumensis* **sp. nov.** p. 75, pl. 3, figs. 1, 2; Cretaceous, Izumi Mt. range; Awaji Island, Japan, **Ichikawa & Maeda;** *N. mayeri friedbergi* **var. nov** p. 40, pl. 1, figs. 4, 4a; Middle Miocene, Marmaroskaky depression, Trans-Carpathia, **Korobkov, I. A. (1).**

†*Nuculana* (*Dacryomya*) *gaveyi* **sp. nov.** p. 267, pl. 40, figs. 1–6; Lower Lias, Mickleton Tunnel near Chipping Campden, Gloucestershire, **Cox, L. R. (5);** *N.* (*Dacryomya*) *toriyamae* **sp. nov.** p. 41, pl. 5, figs. 2, 3; Liassic Higashinakayama, Japan, **Hayami, I. (4);** *N. lecointreae* **sp. nov.** p. 376, pl. 33, f. 47–54, Miocene, Loire Basin, **Dollfus & Dautzenberg** Mém. Soc. géol. France No. 27, Paleont. **20,** 1913; *N. striata* **sp. nov.** p. 366, pl. XIX, fig. 22; Cootamundra, N. S. Wales, Silurian, **Sherrard, K.**

†*Nuculites scissa* **sp. nov.** p. 365, pl. XIX, fig. 19; Bowning, N. S. Wales, Silurian, **Sherrard, K.**

†*Nuculopsis triangula* **sp. nov.** p. 366, pl. XIX, fig. 21; Bowning, N. S. Wales, Silurian, **Sherrard, K.;** *N. gibbosa* (Fleming) lectotype figured and discussed, Carboniferous, **Wilson, R. B. (1).**

†*Palaeosolen planus* **sp. nov.** p. 362, pl. XIX, fig. 4; Cootamundra, N. S. Wales, Silurian, **Sherrard, K.**

†*Phestia* Chernyshev 1951 **nov. emend.** p. 61; Carboniferous, Ostrava beds of the Ostrava-Karviná District, **Kumpera, Prantl & Růžička.**

†*Polidevcia čepeki* p. 47, pl. 2, figs. 7–9; Urx mine, Bohdanmarine band, Petřkovice; *P. gengeli* p. 50, text-figs., 6, 7; pl. 2, figs. 10–12; Doubrava mine, Karviná, Roemeró marine band; *P. vašiček*i p. 53, pl. 4, figs. 1–8, Stařič, Stur's marine band, Petřkovice; Carboniferous **spp. nov., Kumpera, Prantl & Růžička;** *Polidevcia ? attenuata* (Fleming) Carboniferous, lectotype figured and discussed, **Wilson, R. B. (1).**

†Polidevciinae **subfam. nov.** of Nuculanidae p. 33, Carboniferous to Permian; type genus *Polidevcia* Chernyshev 1951 **nov. emend.** p. 34, **Kumpera, Prantl & Růžička.**

†*Portlandia* **(subgen. nov. indet.)** *cuneistriata* p. 82, pl. 4, figs. 1–3, 12, 13; Motago *P.* **(subgen. nov. indet.)** *furcata* p. 83, pl. 4, figs. 7–9a–b; Jizôson, Azenotani; *P.* (s.l.) *izumensis* p. 84, pl. 4, figs. 4a–d, 5, 6; Anaga, Hansanji; **spp. nov.** Cretaceous, Japan, **Ichikawa & Maeda.**

†*Saccella pseudoscissurata* (Takeda) lectotype designated, p. 89, **Oyama, Mizuno & Sakamoto.**

†*Sanguinolites sinuatus* p. 29, pl. 3, f. 9; *S. tichvinensis* p. 30, pl. 3, f. 10, 11; **spp. nov.** L. Carboniferous, Lininka river, Moscow basin, U.S.S.R., **Yanishevskii, M. E.**

†*Sedgwickia limosa* (Fleming) lectotype figured and discussed, Carboniferous, **Wilson, R. B. (1).**

†*Solenomorpha ensiformis* **sp. nov.** p. 31, pl. 3, f. 13, Uglovka, N. W. of Moscow, U.S.S.R. Lower Carboniferous, **Yanishevskii, M. E.**

†*Solenomya primaeva raguschensis* p. 45, pl. 7, f. 3, Ragusch river; *S. p. rovnensis* p. 45, pl. 7, f. 2, 5, 6. Msta river, Rovnoe; *S. p. robusta* p. 46, pl. 7, f. 9, Msta river; **vars. nov.** Moscow basin U.S.S.R. Lower Carboniferous, **Yanishevskii, M. E.**

Spinula vityazi **sp. nov.** nom. nud. p. 138, Kamchatsk region U.S.S.R. North Western Pacific, **Filatova, Z. A.**

†*Tellinopsis flabelliformis* **sp. nov.** p. 363, pl. XIX; fig. 18; Bowning, New South Wales, Silurian, **Sherrard, K.**

†*Yoldia rhombica* **sp. nov.** p. 160, pl. 1, figs. 5–6, Izumida, Ogano-machi, Japan, Lower Miocene, **Kanno, S.;** *Y.* (*Tepidoleda*) *sobrina* Takeda, lectotype designated p. 92, **Oyama, Mizuno & Sakamoto;** *Y.* (*Yoldiella*) *keenae* **sp. nov.** p. 56, pl. 1, figs. 16a, b, 18a, b; Pleistocene, Vancouver Island British Columbia, **Wagner, F. J. E.**

ARCACEA

Anadara inflata electrophoresis of haemoglobin, **Gratzer & Allison;** *A.* (*Scapharca*) *broughtonii* excretion of Keber's organ, **Kato, K.;** *A. braziliana* mobility when partially submerged, **Kornicker & Armstrong;** *A. granosa* (L.) shell form of Japanese recent and fossil shells, figs. **Nagasawa, J. (1);** *A. broughtoni* and *A. subcrenata* carotenoids in the foot, a biochemical study, **Nishibori, K.;** *A. granosa* culture in Malaya, **Pathansali & Soong;** *A. amicula* Yokoyama observations and descriptive notes, figs., **Tanaka, K.**

†*Anadara chichibuensis* **sp. nov.** p. 163, pl. 1, figs. 9–10; Nenokami, Yoshida-machi Japan, Upper Oligocene, **Kanno, S.;** *A.* (*Anadara*) *istmica* p. 12, pl. 1, figs. 3–5; *A.* (*A.*) *woodringi*, p. 13, pl. 2, figs. 3–10; **spp. nov.** Miocene, Cuenca Salina, Isthmus of Tehuantepec Mexico, **Perrilliat-Montoya, M. C.**

Arca biology and anatomy, presence of haemoglobin as respiratory pigment, **Lubet, M.**

†*Arca watanabei* **sp. nov.** p. 162, pl. 1, figs. 7–8; Minezawa, Chichibu-city, Japan, Lower Miocene, **Kanno, S.;** *A.* (*Arca*) *fichteli sanmarinensis* **subsp. nov.** p. 124, pl. 11, figs. 61–63; pl. 12, figs. 68–68b; pl. 13, fig. 71; Casa i Gessi, Rep. S. Marino, Tertiary, **Moroni, M. A. (2);** *A. tuberculata* **sp. nov.** p. 23, f. 11, 12. Ordzhonikidze, and Nikopol region, Ukraine, Eocene, **Zelinskaya, V. A.**

Barbatia (*Spinearca*) *interplicata* first record from Tongyoung, Korea, **Yoo, J. S.**

†*Cucullaea kamtschatica* **sp. nov.** p. 249, pl. 5, f. 6–7, Talovka river, northern Kamchatka, N. E. U.S.S.R., Upper Cretaceous, **Liverovskaya, E. V.**

†*Cyrtodonta lissa* **sp. nov.** p. 369, pl. XIX, figs. 29, 32; Spring Range Road, Ginninderra, N. S. Wales, Silurian, **Sherrard, K.**

†*Cyrtodontula dubia* **sp. nov.** p. 95, pl. 2, figs. 18–20; Røysetangen, Ringerike, Middle Ordovician, Norway, **Soot-Ryen, H. & T.**

Glycymeris ovatus and a survey of the Glycymeridae in Chilean Waters, **Stuardo, J.**

†*Glycymeris kogata* p. 90, pl. 5, figs. 4–7, 10; Kamikunugidani; *G. shimonadensis* p. 92, pl. 5, figs. 8, 9; Mitsugawa **spp. nov.** Cretaceous, Japan, **Ichikawa & Maeda.**

†*Grammatodon toyorensis* **sp. nov.** p. 45, pl. 5, figs. 9–12; Lias, Higashinagano, Japan, **Hayami, I. (4).**

†*Indogrammatodon lormandi* **sp. nov.** p. 20, pl. 1, fig. 3, text-fig. 1; Nouméa-Dumbéa basin, New Caledonia, Cretaceous, **Freneix, S. (1).**

†*Noetia* (*Protonoetia*) *nigeriensis* hinge line and ligament from the Lutetian (Eocene) of Sénégal, **Freneix, S. (2).**

†*Nucinella* (*Huxleyia*) *ochiaiensis* **sp. nov.** p. 123, pl. 11, figs. 1–3; Ochiai N.E. Honshu Japan, Pliocene, **Chinzei, K. (1).**

†*Palaeocucullaea* **subgen. nov.** p. 205 of *Parallelodon*, type species *Parallelodon monobensis* p. 206, pl. XII, figs. 1–6; Hirabara, West Japan, Triassic, **Tokuyama, A. (2).**

†*Parallelodon infraliassicus* p. 42, pl. 5, figs. 4–6; *P.* (?) *subnavicellus* p. 44, pl. 5, figs. 18, 19; pl. 3, fig. 17; **spp. nov.** Lias, Higashinagano, Japan, **Hayami, I. (4)**; *P. kesennumensis* **sp. nov.** p. 89; pl. VIII; figs. 3, 4; Tithonian (Jurassic); Wakagihama, N.E. Japan, **Hayami Sugita & Nagumo**; *P. kamaiensis* **sp. nov.** [**nom. nud.**], p. 49; Permian Urals, Russia, **Nelzina, P. E.**

Philobrya sivertseni p. 8, pl. 1, fig. 1; text-fig. 1; Stoltenhoff, Nightingale Island, *P. insularis* p. 11, pl. 1, figs. 2, 3; text-fig. 2; all Islands in the Tristan da Cunha group **spp. nov., Soot-Ryen, T.**

†*Striarca* (*Africarca*) *nigeriensis* hinge line and ligament from the Lutetian (Eocene) of Sénégal, **Freneix, S. (2).**

MYTILACEA

†*Anthraconauta fomitchevi curta* p. 186, pl. 3, f. 7; *A. f. fastigata* p. 187, pl. 3, f. 8, **vars. nov.** Kendyrlik, Saur Khrebet; *A. zaisanensis* p. 189, pl. 3 f. 13, 14, Akkalka river, Kendyrlik; *A. tengissensis* p. 190, pl. 3, f. 15–18, Tengiz river; **spp. nov.** Kazakhstan, Lower Permian **Lyutkevich & Lobanova**; *A brazhnikovae* p. 90, ext–figs, 3, 4, *A. tschernyschevi* p. 91, text–figs. 5, 6; *A. elongata* p. 92, text–fig. 7; **spp. nov.** Carboniferous, Don Basin, Ukraine, **Sergheeva, M. T.**

Anthracoptera ? *obesa* R. Etheridge jun. 1878 proposal to place *obesa* in this binomen on the Official List, **Wilson, R. B. (2).**

Aulacomya magallanica synonymy characters and distribution Argentina, **Ageitos de Castellanos, Z. J. (1).**

Brachidontes recurvus population mortality and critical salinity values in Chesapeake Bay, **Allen, J. F.**

†*Brachidontes nankoi* **sp. nov.** p. 95, pl. 6, figs. 1a–b; Chikusa, Sumoto City Awaji Island, Japan, Cretaceous, **Ichikawa & Maeda.**

Brachyodontes rodriguezi, *B. purpuratus* and *B. darwinianus* synonymy, characters and distribution, Argentina, **Ageitos de Castellanos, Z. J. (1).**

Chloromya chorus synonymy characters and distribution, Argentina, **Ageitos de Castellanos, Z. J. (1).**

Crenella decussata laticostata **subsp. nov.** p. 65, text–fig. 34, pl. 1, fig. 3; Petra Velikogo, Sakhalin and the Kuril Isles, Okhotsk and Japan Seas, U.S.S.R., **Skarlato, O. A.**

Hilgardella **nom. nov.** pro *Hilgardia* Stephenson 1956 (non Harris and Palmer 1946), **Stephenson, L. W.** J. Paleont. **31** 1957: 795, [Erroneously placed in Nuculacea, Z.R. 1958 p. 140].

Hormomya blakeanus synonymy characters and distribution, Argentina, **Ageitos de Castellanos, Z. J. (1).**

Lecompteus gen. nov. [Z.R. **96**, 1959, p. 81] for **Pol, L. van de,** read **Poel, L. van de.**

†*Limnoperna* (?) *sengokuensis* **sp. nov.** p. 318, pl. XXXVI, figs. 23–29; Sengoku, Wakino area, Fukuoka Prefecture; & Yoshimo & Yoshimi, Toyonishi area, Yamaguchi Prefecture, **Hase, A.**

Lithophaga patagonica synonymy characters and distribution, Argentina, **Ageitos de Castellanos, Z. J. (1).**

†*Lithophaga chikubetsuensis* **sp. nov.** p. 41, pl. 4; fig. 5; Tomamae District, Hokkaido, Japan, Sankebetsu formation Miocene, **Kanno & Matsuno.**

†*Manticula* **gen. nov.** for *Mytilus problematicus* p. 428, figs. 1–4, 26–30; Wairoa Valley, S.E. of Spring Grove, New Zealand Carnian Triassic, **Waterhouse, J. B. (1).**

†*Modiola* (*Brachydontes*) *pontileviensis* **sp. nov.** p. 387, pl. 35, f. 8–15, Miocene, Loire Basin, **Dollfus & Dautzenberg** Mém Soc. Géol. France, No. 27, Paleont **22**, 1920.

Modiolaria viator synonymy, characters and distribution, Argentina, **Ageitos de Castellanos, Z. J. (1).**

†*Modiolaria elaborata* **sp. nov.** p. 389, pl. 35, f. 24–31, Miocene, Loire Basin, **Dollfus & Dautzenberg** Mém. Soc. géol. France, No. 27, Paleont **22** 1920.

†*Modiolopsis* (?) *tiounkelinensis* **sp. nov.** p. 800, pl. XXXVII, figs. 3–6; Ordovician, Sahara, **Legrand, Poueyto & Rouaix**; *M. elongata* **sp. nov.** p. 370, pl. XIX, fig. 11, Balheary, near Taralga, N. S. Wales, Silurian, **Sherrard, K.**

Modiolus demissus correlation between oxygen consumption and attractiveness to *Urosalpinx*, **Blake, J. W.**; *M. modiolus* from Quaternary sediments in the Mediterranean, **Marx & Picard.**

†*Modiolus domingosi* **sp. nov.** p. 27, pl. 2, figs. 2a, 2b; Miocene, Castelo, Fortalezo Is., Pirabas Bay, Pará, Brazil, **Ferreira & Cunha**; *M.magalama* **sp. nov.** p. 46, pl. 5, fig. 13; Lias, Higashinagano, Japan, **Hayami, I. (4)**; *M. shimonadensis* **sp. nov.** p. 93, pl. 6, figs. 2a–b; Ōtani Cretaceous, Japan, **Ichikawa & Maeda**; *M. nagatoensis* **sp. nov.** p. 36; pl. IV; fig. 14; Late Triassic; Higaeribara Miyagi Prefecture, Japan, **Tokuyama, A.**; *M. okubatensis* **sp. nov.** p. 120, pl. XIII, figs. 6–8; Hirabara and Okubata Triassic, West Japan, **Tokuyama, A. (2).**

Musculus (*Musculus*) *minutus* p. 85, text-fig. 44; pl. 4, fig. 6; Komandorskiya Ostrova, Kamchatka and Kuril Isles; *M.* (*M.*) *incurvatus* p. 87, text-fig. 44, pl. 4, fig. 4; N. Okhotsk Sea, U.S.S.R., **spp. nov., Skarlato, O. A.**

Mytilaster lineatus in the bottom fauna of the Molochnaya estuary, **Lubyanov, I. P.**; *M. lineatus* of importance in the benthos of the Central Caspian, **Romanova, N. N.**

Mytilidae from the Sea of Japan and Sea of Okhotsk, U.S.S.R., distribution maps, **Skarlato, O. A.**

Mytilus edulis terminal bars in gill epithelia, **Afzelius, B.**; *M. platensis*, *M. chilensis* and *M. falcatus* synonymy, distribution and characters, Argentina, **Ageitos de**

Castellanos, Z. J. (1); *M. edulis* ciliary activity on the gill and factors affecting this, **Aiello, E. L.**; *M. edulis* metabolism of sulphur amino acids, **Allen & Awapara**; *M. edulis* effect of light and water movements on growth and settling, **Andreu, B.**; *M. galloprovincialis* commercial value on the Black Sea coasts of Roumania, **Bacalbaşa-Dobrovici, N.**; *M. californianus* infested by *Achelia chelata*, **Benson & Chivers**; *M. galloprovincialis* nuclear apparatus during early egg development, **Bolognari, A.** (3); *M. galloprovincialis* ovocyte nucleoli, enzymes and growth, **Bolognari, A.** (5); *M. edulis* heart beat in dense populations, **Buddenbrock, E. v.**; *M. edulis* and *M. galloprovincialis* cultivation in Italy, **Coppini, R.** (2); *M. galloprovincialis* breakdown of 3 : 5 : 3-triiodo-L-thyronine in the hepatopancreas, **Covelli, Blasi & Tommaselli**; *M. californianus*, in vivo incorporation of 2-C^{14} acetate, **Fagerlund & Idler**; *M. edulis* relation between weight, length and chemical composition, **Fraga, F.** (2); *M. edulis* quantitative determination of oligosaccharide, **Fraga, F.** (3); *M. edulis* seasonal variations in chemical content, **Fraga, F.** (4); *M. edulis* study on the amount of protein present and its form, **Fraga & Lopez-Capont**; *M. galloprovincialis* population studies from Ganzirri (Messina), **Genovese, S.**; *M. galloprovincialis* metabolism during anaerobiosis, **Jitariu, M.**; *M. edulis* particle retention and water transport rates, **Jørgensen, C. B.**; *M. edulis* uptake of nitrosyl ruthenium^{106}, **Jones, R. F.**; *M. edulis* calcium and phosphorus contents of tissues and uptake of these elements for utilization in shell formation, **Kado, Y.**; *M. edulis* immobilization reaction of gill cilia immersed in antigill serum, **Koizumi, S.**; *M. edulis* seasonal variations in rate of oxygen consumption, **Krüger, F.**; *M. edulis* and *M. galloprovincialis* from the coast of Belgium invested with *Mytilicola intestinalis*, **Leloup, E.** (2); *M. galloprovincialis* activity of various nitrogen derivatives, **Magri, E.**; *M. californianus* poison studied pharmacologically, **Murtha, E. F.**; *M. galloprovincialis* quantitative distribution on the eastern part of the Crimean coast, **Nikitin, V. N.**; *M. edulis* membrane potential of the anterior byssus retractor muscle, **Paul, D. H.**; *M. edulis* response to copper, development of bioassay methods, **Pearson, Pomeroy & McKee** (2); *M. galloprovincialis* ecological note from the Black Sea and experiments on survival in varying salinities, **Pora, Ruşdea & Stoicovici**; *M. edulis* plasmalogen structure, **Rapport & Alonzo**; *M. galloprovincialis* fixation of iodine and substances thus elaborated, **Roche, André & Covelli**; *M. edulis* cholesterol precursor, **Rossi & Sanguinetti**; *M. californianus* paralytic poison, **Schantz, E. J.**; *M. perna* ratio of conchyolin to calcium carbonate in the shell decreases with age and can be used to date shell middens, **Schoute-Vanneck, C. A.**; *M. edulis aoteanus* ship fouling in New Zealand waters, **Skerman, T. M.**; *M. edulis* nervous control of the anterior byssal retractor, **Takahashi, K.**; *M. edulis* cytology of the hepatopancreas, **Vasconcelos Frazao, J.** (1); *M. edulis* seasonal occurrence on the Carolina coast, **Wells & Gray** (2); *M. edulis* force exerted by a single cilium, **Yoneda, M.**

†*Mytilus* (*Modiolus*) *gortanii* **sp. nov.** p. 42, pl. 6, fig. 1; Diredaua near Harar, E. Africa, Jurassic, **Jaboli, D.**; *M. vidali* **sp. nov.** p. 22, pl. 2, figs. 1a, 1b; Miocene, Poço, Capanema Pará, Brazil, **Ferreira & Cunha**; *M.* (*Falcimytilus*) *hirabarensis* **sp. nov.** p. 210, pl. XIII, fig. 9, Hirabara, Late Triassic, West Japan, **Tokuyama, A.** (2).

†*Najadites aizenvergi* **sp. nov.** p. 89, text-figs. 1, 2; Carboniferous, Don Basin region, Ukraine, **Sergheeva, M. T.**

†*Netschajewia pallasi kendyrlikensis* **var. nov.** p. 182, pl. 2, f. 14, Lower Permian, Saur Khrebet, Kendyrlik, N. E. Kazakhstan, **Lyutkevich & Lobanova.**

†*Volsella arakawensis* **sp. nov.** p. 166, pl. 1, figs. 11–12; Arakawa-mura, Japan Lower Miocene, **Kanno, S.**

PTERIACEA

†*Actinopterella minuta* **sp. nov.** p. 367, pl. XIX, fig. 23; Yass, *A. lamellosa* p. 368, pl. XIX, fig. 9; Bowning, *A. formosa*, p. 368, pl. XIX, fig. 28; Yass, **spp. nov.** N. S. Wales, Silurian, **Sherrard, K.**

†Ahtioconchidae **fam. nov.** p. 74, of Pteriacea for *Ahtioconcha* Öpik 1930, Ordovician, **Eberzin, A. G.** [in **Orlov**].

Atrina rigida protein matrix and shell crystal type, **Watabe & Wilbur.**

†*Atrina pirabensis* **sp. nov.** p. 16, pl. 1, figs. 1a, 1b; Campo do Sal, Pirabas Bay, Pará, Brazil, Miocene, **Ferreira & Cunha.**

†*Aviculopecten tenuistriatus* p. 61, pl. 9, f. 17, Ragusch river; *A. tuberculatus* p. 62, pl 9, f. 16, pl. 11, f. 15, Lininka river; **spp. nov.** Lower Carboniferous, Moscow Basin, U.S.S.R., **Yanishevskii, M. E.**

†*Claraia aurita costulata* **var. nov.** p. 29 [in a table] pl. VIII, fig. 10; Trias Fiemme Valley, Trentino, Italy, **Leonardi, P.**

†*Daonella bulogensis*, *D. pichleri*, *D. indica*, and *Daonella* spp. from the Landenian of Yugoslavia, **Pavlović, P.**; *D. tenuistriata* p. 13, pl. 3, fig. 10; Zohoin in Sakawa; *D. iwayai* p. 15, pl. 2, fig. 15, pl. 3, figs. 8, 9; pl. 4, fig. 4; Tsuzurazaka **spp. nov.** *D. subquadrata symmetrica* **subsp. nov.** p. 19, pl. 1, figs. 8–11; Zohoin; *D. pectinoides* p. 20, pl. 2, fig. 12; pl. 3, fig. 6, text-fig; Tsuzurazaka and Makiodani; *D. asymmetrica* p. 22, pl. 2, fig. 13; Zohoin; *D. hiratai* p. 22, pl. 2, fig. 14; Semidani **spp. nov.** Triassic Japan, **Kobayashi & Tokuyama** (1).

†*Gervillia tatenosawensis* **sp. nov.** p. 227, pl. 26, figs. 9–14; text-fig. 3; Upper Jurassic Soma Group, Fukushima Prefecture, Japan, **Tamura, M.** (3).

†*Halobia* new occurrence in Shikoku, Japan, Trias?, **Bandō, Y.**

†Halobiidae from the Triassic of Thailand, **Kobayashi & Tokuyama M.** (2).

†*Hercynella polaris* **sp. nov.** p. 1107 (807) figs. 1a–c, e; Lek-Elets River, western slope Polar Urals, Lower Devonian, **Chernov, G. A.**; *Hercynella* systematic study, **Pranti, F.**

†*Inoceramus concentricus* and *I.c. subsulcatus* from the Cretaceous of Veliki Krivelj, Yugoslavia, **Antonijević, I.**; *I. crippsi*, *I. tenuis*, *I. pictus*, Cenomanian, *I. labiatus*, *I. cuneiformis* ? *I.* cf. *inconstans*, *I.* cf. *striato-concentricus* Turonian, Germany, **Dietze, H.**; *I.* (*Mytiloceramus*) *karakuwensis* p. 299, pl. XV, fig. 17; Middle Bajocian, Kesennuma City, Miyagi Prefecture; *I. hamadae* p. 302, pl. XV, figs. 14a, b. Callovian, Ono County, Fukui Prefecture; *I. hashiurensis* p. 303, pl. XV, fig. 16; Bajocian to Kimmeridgian, Monon County, Miyagi Prefecture; *I. maedae* p. 308, pl. XVII, figs. 1–3; text-fig. 2; Callovian-Oxfordian, Ono County, Gifu Prefecture; *I. furukawensis* p. 311, pl. XVI, fig. 8; Oxfordian, Yoshiki County, Gifu Prefecture; *I. kudoi* p. 312, pl. XVI fig. 9; pl. XVIII figs. 3–4; Aalenian, Motoyoshi County, Miyagi Prefecture; *I. fukadae* p. 313, pl. XVI, fig. 10, text-fig. 3; Aalenian or Bajocian, Iohinomaki City, Miyagi Prefecture; *I.* (?) *naganoensis* p. 315, pl. XVIII, fig. 6; Callovian or

Oxfordian, Ono County, Fukui Prefecture, **spp. nov.** Jurassic, Japan, **Hayami, I. (2)**; *I. pelelensis* **sp. nov.** p. 257, pl. 3, f. 3, 4. Pel'-el' river, eastern shore of Penzhinskaya Ghuba, N. E. U.S.S.R. Upper Cretaceous, **Liverovskaya, E. V.**; *Inoceramus* spp. from the upper Cretaceous of the Colville River, N. Alaska; **Jones & Gryc**; *I. salisburgensis* in the Senonian of Roumania, **Pauliuc, S.**

†*Leiopteria gregaria* **sp. nov.** p. 369, pl. XIX, figs., 24, 31; Cootamundra, N. S. Wales, Silurian, **Sherrard, K.**; *L. parva* **sp. nov.** p. 55, pl. 9, f. 1–3, Lower Carboniferous, Ragusch river, Moscow Basin, U.S.S.R., **Yanishevskii, M. E.**

Margaritifera margaritifera considered to be extinct in Poland since no living specimens were found in a study of Lower Silesia streams (mainly Izerskie Mts.) and only 67 shells in the Zrenica (Lubań district). **Dutkiewicz, J.**; *M. margaritifera* localization, age and growth of the individual in Pärlälven, Sweden, **Hendelberg, J.**

†*Meleagrinella maccoyelloides* **sp. nov.** p. 39, pl. 3, figs. 2–9; text-figs. 28, 29, Alexander formation, Canning Desert, W. Australia, **Brunnschweiler, R. O.**; *M. japonica* **sp. nov.** p. 47, pl. 5, figs. 20-22; Lias, Higashinagano, Japan, **Hayami, I. (4).**

†*Monotis* (*Daonella*) *lommeli hispanica* **var. nov.** p. 447, pl. 7, f. 1, 2. Trias, Catalania, Spain, **Virgili, C.**

†*Oxytoma kobayashii* **sp. nov.** p. 49, pl. 5, figs. 15–17; Lias, Higashinakayama, Japan, **Hayami, I. (4).**

†*Parainoceramus lunaris* p. 295, pl. XV fig. 1; Pliensbachian; *P. matsumoti* p. 296, pl. XV, figs. 2–8; Toarcian; **spp. nov.** Toyora County, Yamaguchi Prefecture, Japan, Jurassic, **Hayami, I. (2).**

Perna canaliculus ship fouling in New Zealand waters, **Skerman, T. M.**

Pinctada albina, *P. a. albina* and *P. a. sugillata* variation in Australian specimens, **Hynd, J. S.**; *P. radiata*, *P. nigra*, *P. margaritifera*, *P. maculata*, *P. chemnitzi*, *P. martensi*, *P. maxima*, *P. mazatlanica* species problem, **Ranson, G. (1)**; *P. maxima* studies on age determination, **Sagara & Takemura**; *P. maxima* diatoms as an important food source, **Takano, H.**; *P. martensii* relation between the crystalline structure of nacre and the behaviour of shell forming tissue, **Wada, K.**; *P. martensii* protein matrix and shell crystal type, **Watabe & Wilbur.**

Pinna nobilis, investigation of mucoid-comprising substance of crystalline style, **Bailey & Worboys.**

†*Pinna noesmoeni* **sp. nov.** p. 26, pl. 1, figs. 7a, b; Nouméa–Dumbéa basin, Cretaceous, New Caledonia, **Freneix, S. (1).**

Pteria (*Austropteria*) *dendronephthya* **sp. nov.** p. 289, type locality: Tomioka, Amakusa, Kumamoto Pref., distribution: Tanabe Bay, Wakayama Pref., **Habe, T. (4)**; *P.* (*Pinctada*) *martensii* effect of organic acids on Ca ion concentration, **Horiguchi, Y. (1)**; *P.* (*Pinctada*) *martensii* ion products in blood and tissue fluids, **Horiguchi, Y. (2)**; *P.* (*Pinctada*) *martensii* organic acids in tissues, **Horiguchi, Y. (3)**; *Pt.* (*Pinctada*) *martensii* phosphorus metabolism studied using ^{32}P., **Horiguchi, Y. (4).**

†*Pteria masatanii* **sp. nov.** p. 224; pl. 26, figs. 19, 20; Upper Jurassic Soma Group Fukushima Prefecture, Japan, **Tamura, M. (3)**; ? *Pteria spedeni* **sp. nov.** p. 431, figs. 5–7; Otamitan beds (Triassic) at Nelson, New Zealand, **Waterhouse, J. B. (1).**

†*Pterinea macroptera* musculature and dentition from the Permian, **Dickins, J. M. (2).**

†*Pterinopectinella* cf. *P. welleri* Newell 1937, marine clam in freshwater sediments, Oklahoma, **B[ranson], C. C. (3).**

Pteroconchida **order nov.** p. 85 [in table] of subclass Pteriomorphia in the classification of the Bivalvia proposed by the author to include and replace Pteriacea Pinnacea, Pectinacea, Limacea and Anomiacea, **Cox, L. R. (9).**

†*Pteronitella rugosa* **sp. nov.** p. 368, pl. XIX, fig. 8; Hatton's Corner, Yass, New South Wales, Silurian, **Sherrard, K.**

†*Pteroperna pauciradiata* p. 226, pl. 26, figs. 1, 2; *P. lingulata* p. 226, pl. 26, figs. 16–18; **spp. nov.** Upper Jurassic Soma Group, Fukushima Prefecture, Japan, **Tamura, M. (3).**

†Rhombopteriidae Korobkov "**fam. nov.** of Pectinacea" [? vero prop. Pteriacea] for *Rhombopteria* and *Posidonia* Silurian to Jurassic, **Eberzin, A. G.** [in **Orlov**].

Rostroconchida **order nov.** p. 85 [in table] of subclass Pteriomorphia to replace Conocardiacea in new Bivalvia classification scheme proposed by the author, **Cox, L. R. (9).**

†*Somapteria* **gen. nov.** Pteriidae p. 224; type. sp. *S. koikensis* **sp. nov.** p. 225, pl. 26, figs. 3–8; text-figs. 1, 2; Upper Jurassic Soma Group, Fukushima Prefecture, Japan, **Tamura, M. (3).**

†*Streblopteria gigantea* **sp. nov.** p. 66, pl. 10, f. 7· Lower Carboniferous. Msta river, Moscow basin. U.S.S.R., **Yanishevskii, M. E.**

PECTINACEA

Aequipecten irradians, life history, ecology and population study, **Marshall, N.**

†*Aequipecten hataii* **sp. nov.** p. 169, pl. 1, figs. 14–18; Chigaya, Yoshida–machi, Japan, Upper Oligocene, **Kanno, S.**; "*Aequipecten*" *toyorensis* **sp. nov.** p. 55, pl. 6, figs. 1–5; Lias, Higashinagano, Japan, **Hayami, I. (4).**

†*Amussium* distribution in the Miocene of eastern Provence, **Catzigras, F.**

†*Antiquilima nagatoensis* **sp. nov.** p. 66, pl. 7, figs. 4a–c; Lias, Higashinagano, Japan, **Hayami, I. (4).**

Chlamys (F. acc. *Hinnites*) *abscondita* from the E. coast of Africa, description completed, **Adam, W. (6)**; *C. japericensis* p. 144, pl. 2, fig. 2; R. Japerica, Salinópolis; *C.* (*Argopecten*) *tetristriata* p. 149, pl. 2, fig. 1; Fazenda, Fortaleza Is., Pirabas Bay; *C.* (*A.*) *coopericellus* p. 150, pl. 2, fig. 4; Fazenda, Salinópolis; *C.* (*A.*) *capanemensis* p. 151, pl. 3, fig. 3; Igarapé Xibé, N. of Capanema, Guilhermino; *C.* (*Leptopecten*) *pirabensis* p. 154, pl. 4, fig. 2; Fazenda, Fortaleza Is., Pirabas Bay, Salinópolis Pará State, Brazil, Lower Miocene, **spp. nov., Ferreira, C. S.**; *C.* (*Argopecten*) *rehderi* **sp. nov.** p. 15, pl. 2, figs. 1–3; Tereia Point, Bora Bora Island, Leeward Group Society Islands, French Oceania, **Grau, G.**; *C. nippoensis* isolation of lecithin and cephalin phosphatides, **Zama, Hatano et al.**

†*Chlamys* (F. acc. *Hinnites*) *ercolaniana* from the Pliocene and Miocene of Europe identified with *C.* (*H.*) *abscondita* from the E. coast of Africa, **Adam, W. (6)**; *C. scabrella hungarica* **subsp. nov.** p. 21, pl. XII, figs. 21–23; pl. XIII, figs. 1–8, 11; Fót, Somlóhegy; Helvetian; *C. biaense* p. 28, pl. XIX, figs. 3–6; *C. rákosense* p. 29, pl. XIX, figs. 9–15, pl. XXXIV, fig. 12; Bia, Tortonian; *C. darnóensis* p. 30, pl. XX, figs. 6, 10; Recsk–Darno, Burdigalian; *C. agriensis* p. 31, pl. XX, figs. 15, 16; Eger, Aquitanian; **spp. nov.** *C. palmata*

bipartita **subsp. nov.** p. 36, pl. XXXIII, figs. 8–10; Budafok, Burdigalian Miocene, Hungary, **Csepreghy-Meznerics, I. (2)**; *C.* affinities with *C. bollenensis* Pliocene and also *C. commutata;* found in the Roquebrune-Cap-Martin beds of Jurassic and Cretaceous age, **Iaworsky, G.**; *C. akahirensis* **sp. nov.** p. 167, pl. 1, figs. 13a–b; Gôheibashi, Obashira Japan, Oligocene, **Kanno, S.**; *C. cisaralica* **sp. nov.** p. 167 (635) pl. 1, figs. 10, 11; Upper Eocene, Chimbai village, S. and W. of the Aral Sea, U.S.S.R., **Korobkov & Makarova**; *C. jarcevae* **sp. nov.** p. 58, pl. 1, figs. 6–9; Tertiary, Ukraine, **Merklin & Rozhe**; *C.* (*Merklinia*) **subgen. nov.** p. 67, subgenotype: *Pecten asper* Lamarck, 1819, Cenomanian, France; Mid part of the Dnestr River Basin, U.S.S.R., **Sobetzky, V. A.**; *C. bagattii* **sp. nov.** p. 53, [in a list] Colle di Vigoleno, Miocene, **Venzo, S. (2).**

†Chlamysinae Korobkov **subfam. nov.** p. 83, of Pectinidae for *Chlamys, Indopecten, Hinnites, Prohinnites, Camptonectes, Lyssochlamys, Pseudamussium* and *Lentipecten* Trias, **Eberzin, A. G. [in Orlov].**

†*Ctenostreon japonicum* **sp. nov.** p. 67, pl. 7, figs. 5, 6; Lias, Higashinagano, Japan, **Hayami, I. (4).**

Cyclopecten (*Cyclochlamys*) *perplexus* **sp. nov.** p. 17, pl. 1, figs. 8–13; text-figs. 3, 4; Nightingale and Inaccessible Islands, **Soot-Ryen, T.**

†Entoliinae Korobkov **subfam. nov.** p. 83, of Pectinidae for *Pernopecten* and *Entolium* Carboniferous to Cretaceous, **Eberzin, A. G. [in Orlov].**

†*Eopecten stoppanii* **sp. nov.** p. 308, pl. XVI, figs. 1–3; Valle di Prada, Pizzo di Cainallo, Pizzo della Conca Lombardy, Triassic, **Ronchetti, C. R. (1).**

†*Flabellipecten telegdi-rothi* **sp. nov.** p. 16, pl. XI, figs. 6–8; Eger Hungary, Aquitanian, Miocene, **Csepreghy-Meznerics, I. (2).**

†*Lima* (*Ctenoides*) *morgani* **sp. nov.** p. 447, pl. 38, f. 13–16; Miocene Loire Basin, **Dollfus & Dautzenberg,** Mém. Soc. géol. France, No. 27, Paleont **22**, 1920; *L.* (*Plagiostoma*) *bianchii* **sp. nov.** p. 30, pl. 4, figs. 6, 7; Harar, Malca Balcad Gebiss, Somalia, Jurassic, **Jaboli, D.** *L. lineata* photonegative young in the Triassic, **Jefferies, R. P. S.**; *L.* (*Acesta*) *amazensis* new locality in Kagoshima Prefecture, Japan, **Monden, S.**

Limatula nippona **sp. nov.** p. 282, type locality: Tanabe Bay, Wakayama Pref., distribution: Katsuure Bay, Wakayama Pref., and Tomioka, Amakusa, **Habe, T. (3)**; *L. nippona* **sp. nov.** [n.n.] Habe p. 46; Tanaba Bay, Wakayama Prefecture, Japan, **Habe, T. (5).**

†*Limatula akiyamae* **sp. nov.** p. 93; pl. VIII, fig. 15; Berriasian (Cretaceous); Nagasaki and Isokusa, N.E. Japan, **Hayami, Sugita & Nagumo**; *L. asoensis* **sp. nov.** p. 33; pl. IV, figs. 4, 5; Late Triassic; Aso and Kamiyuguchi, Mine City, Nagato, W. Japan, **Tokuyama, A.**

Limidae from the Sea of Japan and Sea of Okhotsk, species distribution maps, **Skarlato, O. A.**

†*Limipecten dissimilis* (Fleming) lectotype selected, figured and discussed, Carboniferous, **Wilson, R. B. (1).**

Mantellum amakusaense **sp. nov.** p. 281, type locality: Tomioka, Amakusa, Kyushu; distribution: Tanabe Bay, Wakayama Pref., Honshu, **Habe, T. (3).**

†*Merklinia* **subgen. nov.** of *Chlamys* q.v., **Sobetzky, V. A.**

†*Micronectes* **gen. nov.** p. 95, of Pectinidae type species *M. bellaturus* **sp. nov.** p. 98, pl. 5, figs. 13a–b, 14, 15a–c, 16, 17; Azenotani, Izumi Mt. range Japan, Cretaceous, **Ichikawa & Maeda.**

†*Mysidioptera ominensis* **sp. nov.** p. 208, pl. XIII, figs. 10, 11; Omine, Hirabara formation Late Triassic, West Japan, **Tokuyama, A. (2)**; *M. riceae* **sp. nov.** p. 435, figs. 8, 12–14, 16–20; Waiwera River, New Zealand, Triassic, **Waterhouse, J. B. (1).**

†*Nanaochlamys notoensis, N. n. otutumiensis* Early Miocene and *N. kitamurai* Oligocene morphogenesis, **Masuda, K. (2).**

†Neitheinae **subfam. nov.** of Pectinidae, p. 68, for *Neithea* Drouet, 1824; Cretaceous of Europe, Asia, Africa and America, **Sobetzky, V. A.**

Notochlamys hallae **sp. nov.** figs. 1, 2; [p. 1.]; Largs Bay, South Australia, **Cotton, B. C. (17).**

†Palliloluminae Korobkov **subfam. nov.** p. 84 of Pectinidae for *Palliolum, Similipecten* and *Delectopecten* Cretaceous, **Eberzin, A. G. [in Orlov].**

†*Parvamussium* (*Parvamussium*) *kyushuense* **sp. nov.** p. 127, pl. 12, figs. 4, 7; text-figs, 7–14; Upper Miocene, Nagano Mino mura, Koyu gun, Miyazaki Pref. Japan, **Shuto, T. (1).**

Patinopecten yessoensis mortalities during the life cycle, **Yamamoto, G.**

†*Patinopecten pseudoyessoensis* **sp. nov.** p. 99, pl. 5, figs. 1a, 1b, 2a, 2b, 3, 4, 5; Oyato Totsuka-ku, Yokohama City, Kanagawa Pref., Japan, Pliocene, **Akiyama & Miyajima**; *P. kimurai yudaensis* p. 256, pl. 30, figs. 1,2; Shiratori formation, Iwate Prefecture; *P. k. nakosoensis* p. 256, pl. 29, figs. 2, 3; Kokozura formation, Amori Prefecture, **subspp. nov.** Miocene, Japan, **Masuda, K. (3).**

Pecten yessoensis effects of storing temperature on the content of muscular nucleotides, **Arai, K.**; *P. latiauratus* particle retension and water transport rate, **Jørgensen, C. B.**; *P. jacobeus* analysis of water, protein and fat content, **López-Benito, M. (2)**; *P. yessoensis* separation of myosin, **Maruyama & Kominz**; *P. yessoensis* carotenoids in the ovary, **Nishibori, K.**; *P. irradians* plasmalogen structure, **Rapport & Alonzo**; *P. irradians* and *P. magellanicus* cytochrome study of muscles, **Tappel, A. L.**; *P. maximus* biogenesis of octopine in different tissues, **Thoai & Robin**; *P. irradians* experimental stimulation of gametogenesis in the winter, **Turner & Hanks**; *P. yessoensis* isolation of lecithin and cephalin phosphatides, **Zama, Hatano et al.**

†*Pecten gerardii* typical of the Suffolk Coralline Crag, **Baden-Powell, D. F. W.**; *P.* (*Fortipecten*) *kenyoshiensis* **sp. nov.** p. 64; pl. 7, figs. 1–7; text-figs. 1, 2; Upper Pliocene, Amori Prefecture, N.E. Japan, **Chinzei, K. (2)**; *P. fótensis* p. 13, pl. V, figs. 4–6; Fót, Somlyóhegy, Helvetian, *P. promontorensis* p. 13, pl. VI, fig. 3; Budafok, Burdigalian; **spp. nov.** Miocene, Hungary, **Csepreghy-Meznerics, I. (2)**; *P.* (*Variamussium*) *morgani* p. 430, pl. 41, f. 5–14; *P.* (*Chlamys*) *couffoni* p. 430, pl. 38, f. 3–6, Miocene, Loire Basin, **spp. nov., Dollfus & Dautzenberg,** Mém. Soc. géol. France, No. 27 Paleont. **22**, 1920; *P. vigolenensis anomala* p. 53, *P. v. transversa* p. 53, *P. v. obliqua* p. 53, **vars. nov.** *P. sub-reghiensis* **sp. nov.** p. 53, [in a list] Colle di Vigoleno, Miocene, **Venzo, S. (2).**

Pectinidae from the Sea of Japan and Sea of Okhotsk, species distribution maps, **Skarlato, O. A.**

Placopecten magellanicus living inclusions in the shell, **Merrill, A. S.**; *P. magellanicus* hermaphroditism, **Merrill & Burch**; *P. magellanicus* spawning, Georges Bank, Atlantic, **Posgay & Norman.**

†*Plagiostoma kobayashii* p. 63, pl. 6, figs. 21–23; *P. matsumotoi* p. 64, pl. 6, figs. 24, 25; pl. 7, figs. 1–3;

spp. nov. Lias, Higashinagano Japan, **Hayami, I. (4)**; *P. higaeribarense* **sp. nov.** p. 34; pl. IV figs. 1, 2; Higaeribara; *P. h. yuguchiense* **var. nov.** p. 35; pl. IV, fig. 3; Kamiyuguchi, W. Japan, Triassic, **Tokuyama, A.**

†*Plicatula subcircularis* p. 60, pl. 6, figs. 14–16; *P. praenipponica* p. 61, pl. 6, figs. 17–19; **spp. nov.** Lias, Higashinagano, Japan, **Hayami, I. (4).**

Promantellum hirasei electron microscopy of the adductor muscle, **Kawaguti & Ikemoto (1).**

†*Propeamussium awajense* **sp. nov.** p. 101, pl. 5, figs. 11, 12a–b; Hansanji, Awaji Island, Japan, Cretaceous, **Ichikawa & Maeda.**

†Prospondylidae Pchelintzev **fam. nov.** p. 86, of Spondylacea for *Prospondylus* and *Terquemia* Carboniferous to Jurassic, **Eberzin, A. G. [in Orlov].**

†*Protoentolium* **gen. nov.** p. 67, Amussiidae, genotype: *Pecten sowerbyi* M'Coy Lower Carboniferous, Ireland; *P. sowerbyi regularis* p. 70, pl. 11, f. 10; *P.s. obliqua* p. 70, pl. 11, f. 11, 12; **vars. nov.** Msta river, Rovnoe, Moscow basin U.S.S.R. Lower Carboniferous, **Yanishevskii, M. E.**

†*Rhombopteria obliqua* **sp. nov.** p. 367, pl. XIX, fig. 26, Cootamunda, New South Wales, Silurian, **Sherrard, K.**

†Rhombopteriidae Korobkov **fam. nov.** p. 81, of Pectinacea for *Rhombopteria*, and *Posidonia* Silurian to Jurassic [vide sub Pteriacea], **Eberzin, A. G. [in Orlov].**

†*Spondylus kamitanoensis* **sp. nov.** p. 171, pl. 1, figs. 19a–c;Bushu-nakagawa Station, Arakawa-mura, Japan; Lower Miocene, **Kanno, S.**

†*Syncyclonema noetlingi* **sp. nov.** p. 64, pl. 8, f. 2; Upper Cretaceous, Mid part of the Dnestr River basin, **U.S.S.R., Sobetzky, V. A.**

†*Variamussium fallax armenica* **subsp. nov.** p. 83, pl. 9, f. 3–6, Chimankend, basin of rivers Vendi and Sharap, Armenia; Zone of *V. fallax*, Paleogene, **Aslanjan in Korobkov (4)**; *V. captiosum asiatica* **subsp. nov.** p. 82, pl. 9, f. 10–12, Middle Eocene(?) region of Lau-Lau mountain, Kyzyl-Kum, Uzbekistan, U.S.S.R., **Korobkov & Makarova in Korobkov (4).**

ANOMIACEA

Anomia walteri, ship fouling in New Zealand waters, **Skerman, T. M.**

Anomiidae from the Sea of Japan, and Sea of Okhotsk, species distribution maps, **Skarlato, O. A.**

OSTREACEA

Colloconchida **order nov.** p. 85 [in table] of subclass Pteriomorphia to replace Ostreacea in new Bivalvia classification scheme proposed by the author, **Cox, L. R. (9).**

Crassostrea virginica correlation between oxygen consumption and attractiveness to *Urosalpinx*, **Blake, J. W.**; *C. virginica* introduced to Hawaiian waters, **Brock, V. E.**; *Crassostrea* sp. biology and culture in Deep Bay, Hong Kong, **Bromhall, J. D.**; *C. virginica* respiration observations, **Collier, A.**; *C. angulata* culture in Morocco, **Collignon, J. (2)**; *C. gigas* bacteriological study of the natural flora of the Pacific oyster, **Colwell & Liston**; *C. gryphoides* shell disease, **Durve & Bal**; *C. virginica* carbon dioxide fixation, **Hammen & Wilbur**; *C. virginica* factors affecting variability, **Lee, Kurtzman & Pepper**; *C. virginica* predation by the mud crab *Panopeus*, **McDermott, J. J.**; *C. virginica* and *C. angulata* detailed anatomy of gills and palps, **Nelson, T. C.**; *C. virginica* providing an excellent substratum for a community of zooparasites, **Shuster, C. N. jr.**; *C. virginica* muscle cytochrome study, **Tappel, A. L.**; *C. virginica* microbes injected into the American oyster, **Tripp, M. R.**; *C. gigas* spawning and the effect of pulp and paper mill wastes, **Waldichuk, M.**

†*Crassostrea gryphoides*, Miocene outcrops of beds, Ust Urt, Krasnovodsk peninsula and S. Tuarkyr uplands, **U.S.S.R., Aleksin & Merklin.**

†*Exogyra columba*, *E. flabellata* and *E. olisiponensis* varieties, geographic distribution and relationships, Cretaceous, Coimbra and Figueira da Foz., **Soares, A. F.**

†*Flemingostrea* Vredenburg, distribution, pp. 32–33, **Stenzel, H. B.**

Gryphaea gigas cytochemical studies on fertilized egg gradient axis, **Kobayashi, H.**; *G. angulata* ecology and reproduction at Morbihan, France, **Marteil, L.**; *G. angulata* tissue culture in vitro, **Vago & Chastang**; *G. annulata* cytological study of the hepatopancreas, **Vasconcelos-Frazao, J. (1).**

†*Gryphaea* (*Texigryphaea*) **subgen. nov.** q.v., **Stenzel, H. B.**

†*Liostrea* (*Catinula*) *shiraiwensis* **sp. nov.** p. 209, pl. XII, figs. 8–12; Hirabara formation, Late Triassic, Hirabarazaka, West Japan, **Tokuyama, A. (2)**; *L. toyorensis* **sp. nov.** p. 68, pl. 7, figs. 7, 8; Lias, Higashinagano, Japan, **Hayami, I. (4).**

†*Lopha sazanami* **sp. nov.** p. 69, pl. 7, figs. 9, 11; Lias, Higashinagano, Japan, **Hayami, I. (4).**

Ostrea puelchana and *O. spreta* ecology, anatomy and reproduction, Argentina, **Ageitos de Castellanos & Cabrera**; *O. edulis* culture in Morocco, **Collignon, J. (2)**; *O. edulis* cultivation in Italy, **Coppini, R. (2)**; *O. gigas* studies on shell formation, **Kado, Y.**; *O.* (*Saxostrea*) *echinata* excretion of Keber's organ, **Kato, K.**; *O. edulis* reproduction and ecology at Morbihan, France, **Marteil, L.**; *O. edulis* pH value of the stomach, **Morton, J. E. (1)**; *O. edulis* feeding mechanism, gills and palps detailed anatomy, **Nelson, T. C.**; *O. sinuata* ship fouling in New Zealand waters, **Skerman, T. M.**; *O. edulis* culture of tissues in vitro, **Vago & Chastang.**

†*Ostrea* (*Crassostrea*) *gigas* from the Japanese Pleistocene and their palececological implications, **Hayasaka, S.**; *O.* (*Saccostrea*) type sp. *O.* (*S.*) *saccellus* Dujardin, p. 471; Miocene, Loire Basin; First known mention of the subgenus though not stated to be new here, **Dollfus & Dautzenberg** Mém. Soc. géol. France, No. 27 Paleont, 22, 1920.

Ostreidae classified into 3 genera *Pycnodonta*, *Crassostrea* and *Ostrea* according to their "prodissoconque," **Ranson, G. (2)**; Ostreidae from the Sea of Japan and Sea of Okhotsk, species distribution maps, **Skarlato, O. A.**

†*Pycnodonta vesicularis vesiculosa* from the Albian of Topal, Roumania, **Bărbulescu, A.**

Pycnodonteinae **subfam. nov.** p. 16, Ostreacea, Cretaceous, **Stenzel, H. B.**

Saxostrea echinata (Q. and G.) Identification of the larval stage, 7 text figs. and pls. 2, 3, **Tanaka, Y.**

†*Texigryphaea* **subgen. nov.** of *Gryphaea*, p. 22; Genotype: *G.* (*T.*) *roemeri* Marcou, 1862, Lower Cenomanian Grayson marl, Texas U.S.A. = *G. graysonana* Stanton, 1947; p. 22, figs. 1, 2, 6, 13, **Stenzel, H.B.**

TRIGONACEA

†*Myophorella* (*Myophorella*) *borealis* p. 197, pl. 1, f. 1, pl. 2, f. 1, 2; *M.* (*M.*) *uralica* p. 200, pl. 3, f. 1; *M.* (*M.*) *obscura* p. 201, pl. 3, f. 2; **spp. nov.** Yatriya river, east slopes of the prepolar Urals, U.S.S.R. Upper Jurassic, **Saveliev, A. A.**

†*Neoschizodus permicus* p. 55; pl. VI; figs. 4–9; text-fig. 1; Late Permian, Kasa-gun; *N.* (?) *shikii* p. 59; pl. VI, figs. 34–38; Eo-Triassic, Oe-cho, Kyoto Prefecture; Japan, **spp. nov., Nakazawa, K. (2).**

†*Oistotrigonia saunali* **sp. nov.** p. 36, pl. 2, figs. 11a, b, 12; Poya basin, Bourail basin, Moindou basin and Nouméa-Dumbéa basin, New Caledonia, Cretaceous, **Freneix, S. (1).**

†*Schizodus giganteus* **sp. nov.** p. 25, pl. 2, f. 15, pl. 3, f. 1; Msta river, N. W. Moscow basin, U.S.S.R. Lower Carboniferous, **Yanishevskii, M. E.**

†*Trigonia knighti* **sp. nov.** p. 90, pl. 1, figs. 1–3; Amsterdam Hoek; Cape Province; Sundays River Beds, Uitenhage Series, Cretaceous, (Neocomian), **Pringle, J. A.**; *T. sydorenko-eremeievae* p. 96, pl. 1, f. 1–4; Tokovoi river, Saldinsk region, Sverdlovsk Province; *T. gladkowskii* p. 98, pl. 2, f. 1, 2, Kushmurun, Kazakstan; **spp. nov.** Lower Santonian, Cretaceous, East Urals, **Shcheghlova-Borodina, O. N.**

UNIONACEA

Anodonta cyred oxygen consumption, **Aliev, A. (2)**; *A. cygnea* transmethylation, **Ericson, L.-E.**; *A. cygnea* heart blockage by various chemical substances applied whilst *in situ*, **Jullien, Acolat, Cardot, Joly & Bride**; *Anodonta* sp. heart physiology experimental study, **Jullien, Cardot, Joly & Bride (1)**; *A. cygnea* blockage of heart rhythm by KCl, **Jullien, Cardot, Joly & Bride, (2)**; *A. cygnea* experiments on heart, **Jullien, Ripplinger, Cardot et al (5)**; *A. cellensis* shell incrustations in ponds near Homole and Strašnice, Czechoslovakia, **Komárek, K.**; *A. piscinalis* glochidia parasitizing fish in Norway, **Malmberg, G.**; *A. cygnaea* effect of RNA on Ca^{45} C_{14} uptake by the mantle edge, **Nair, K. K.**; *A. cygnaea* ionic composition of the haemolymph and respiratory tissues, **Pora, Rusdea, Stoicovici et al.**; *A. grandis* indicates a climate like present time at " Williams Site " Texas, **Suhm D. A.**; *A. cellensis* manganese deposits on shells from Prague, **Táborský, K.**; *A. minima* Müller in Monmouthshire, **Woodward, F. R.**

†*Arconaia contorta* Pleistocene Wuhohsien, N. Anhwei China, **Chow, M. M.**

†*Carbonicola antiqua* and *C. elegans* Carboniferous non-marine lamellibranchs from East Fife, Scotland, **Bennison, G. M.**

Cristaria plicata spatiosa excretion of Keber's organ, **Kato, K.**

Elliptio tamauliponensis reflect climate much like present time at " Williams Site " Central Texas, **Suhm, D. A.**; *E. complanatus* protein matrix and crystal type, **Watabe & Wilbur.**

†*Elliptio mormonum* **sp. nov.** p. 17, pl. 1, figs. 9–12; Eocene U. Flagstaff beds; Fairview Canyon, Wasatch Plateau, Utah, **La Rocque, A. (1).**

Hyriopsis schlegelii cytochrome-like haemoproteins in gut fluids, **Kawai, K. (1)**; *H. schlegelii* effect of organic acids on Ca ion concentration, **Horiguchi, Y. (1)**; *H. schlegelii* ion products in blood and tissue fluids, **Horiguchi, Y. (2)**; *H. schlegelii* organic acids in tissues, **Horiguchi, Y. (3).**

†*Iridina* (*Pleiodon*) *aswanensis* **sp. nov.** p. 469, pl. 2, figs. 4a, b; N. of Wadi el Kirkubôb and 19 kms E. of Aswan, **Cox, L. R. (7).**

†*Lamprotula spuria* and *L. fibrosa* found beyond the northern limit of their recent distribution, Pleistocene, Wuhohsien, China, **Chow, M. M.**

†*Lampsilis spiekeri* **sp. nov.** p. 18, pl. 1, figs. 13–18; U. Flagstaff beds, Eocene; Fairview Canyon, Wasatch Plateau, Utah, **La Rocque, A. (1).**

†*Lanceolaria grayana* Pleistocene, Wuhohsien, N. Anhwei, China, **Chow, M. M.**

†*Lepidodesma languilata* Pleistocene, Wuhohsien, N. Anhwei, China, **Chow, M. M.**

Margaritana margaritifera sizes attained and a general study from Estonia, **Vilbaste, J.**

†*Megalodon banffensis* **sp. nov.** p. 105, pl. 20, figs. 1–9; Exshaw Creek, Banff Alberta; Permo-Carboniferous, **McGugan, A.**

Naiadida **order nov.** p. 85 [in table] of subclass Heteroconchia to replace Anthracosiacea and Unionacea in new Bivalvia classification scheme proposed by the author, **Cox, L. R. (9).**

†*Naiadites crassus* (Fleming) lectotype figured and discussed Carboniferous, **Wilson, R. B. (1).**

†" *Nippononaia* " *wakinoensis intermedia* **subsp. nov.** p. 316, pl. XXXVII, figs. 5–9; pl. XXXVIII, figs. 2, 3; text-fig. 4b; Kanda-misaki, Kantama-mura; " *N.*" (?) *obsoleta* **sp. nov.** p. 317, pl. XXXVII, figs. 10a–d, 11; pl. XXXVIII, fig. 1a, b; text-fig. 4c; Okochi and Jiyoshi, Nishiichi-cho, Yamaguchi, Pref. Japan, Mesozoic, **Hase, A.**

Proptera berlandieri indicates a climate similar to present time for " Williams Site " Central Texas, **Suhm, D. A.**

†*Pseudavicula papyracea* characters and relationships of the Mesozoic genus, **Dickins, J. M. (1).**

†*Quenstedtia* ? *lomamiensis* **sp. nov.** p. 9, pl. 1, figs. 4–6; Stanleyville beds, Mesozoic, Lomami River upstream from Obenge Benge, Belgian Congo, **Cox, L. R. (8).**

Strophitus undulatus indicates a climate like present time at " Williams Site " Texas, **Suhm, D. A.**

†*Tancrediopsis delicatula* p. 364, pl. XIX, fig. 20; *T. minuta* p. 365, pl. XIX, fig. 16; **spp. nov.** Bowning, N.S. Wales, Silurian, **Sherrard, K.**

Unio aucklandicus Gray (= *Hyridella* (*H.*) *aucklandica* (*Gray*)) lectotype selected, specimen 42-11-9-75 (British Museum), Auckland, New Zealand, **Hiscock, I. D.**; *U. tumidus* population fluctuation in Poland, **Stańczykowska, A. (1).**

†*Unio adensis* **sp. nov.** p. 375, pl. XXVII, fig. 8; Ade, Kosovo basin, Yugoslavia, Pliocene, **Atanacković, M.**; *U. attiai* p. 468, pl. 2, figs. 3a, b; *U. nubianus* p. 468, pl. 2, fig. 1; **spp. nov.** N. of Wadi el-Kirkubôb and 19 kms E. of Aswan, Cretaceous, Nubian sandstone, **Cox, L. R. (7)**; " *Unio* " *urii* Fleming 3 examples identified as *Anthracosia atra*, *A.* cf. *caledonica* and *A.* cf. *lateralis*; discussion of nomenclature, Carboniferous, **Wilson, R. B. (1).**

Unionidae, list of Austrian species with distribution notes and synonymy, **Klemm, W. (3)**; Unionidae from the Angel Site, Vanderburgh Co., Indiana, (a list of species), **Parmalee, P. W.**; Unionidae and variations in the family, **Stratton, L. W. (1)**; Unionidae, distribution around Belgrade, taxonomy and general structure, **Tadić, A. (1).**

†Unionidae from the Triassic of Springfield Basin, S. Australia, **Ludbrook, N. H. (1).**

Velesunio moretonicus (Reeve), **comb. nov.** p. 123, pl. 1, f. 1–5, for the holotype of *Unio moretonicus* Reeve from Tasmania; *moretonicus* Reeve replaces *legrandi* Petterd, 1889 for the Tasmanian velesunionine mussels, **Hiscock, I. D.**

ASTARTACEA

†*Astarte cozi* **sp. nov.** p. 50, pl. 6, fig. 7; Diredaua near Harar, E. Africa, Jurassic, **Jaboli, D.**; *A.* (*Coelastarte*) *somensis* **sp. nov.** p. 287, pl. 33; figs. 11–13; Nakanosawa formation, Jurassic, Japan, **Tamura, M.** (1); *A.* (chiefly circum-arctic and boreal marine pelecypod) occurring with *Nipa* (Indo-Malayan palm) in the Eocene London clay, **Woodring, W. P.**

†*Crassatella clarkensis ludoviciana* **subsp. nov.** p. 986, pl. 1, figs. 3–8; Middle Eocene, Mississippi, **Kent, L. S.**; *C.* (*Crassatina*) *carpatica* **sp. nov.** pp. 110, 113; text-fig. p. 111; Sillein, Czechoslovakia, Burdigalian, Miocene, **Seneš, J.** (2).

†*Crassatellites iheringi* **sp. nov.** p. 97, pl. 1, fig. 2; River Ewan, Tierra del Fuego, Paleocene, **Camacho, H. H.**

CARDITACEA

†*Crenotrapezium kitakamiense* **sp. nov.** p. 17; pl. III, figs. 8–10; text-fig. 2; (Wealden) lower Cretaceous; Nagashioya, Miyagi Prefecture, Japan, **Hayami, I.** (1).

†*Glans* (*Cycloglans*) *schencki* hinge line and ligament from the Lutetian (Eocene) of Senegal, **Freneix, S.** (2); *G. oligocenicus tetragonata* **var. nov.** p. 20, pl. 2, f. 1, 2, Ordzhonikidze and Nikopol region, Ukraine, Eocene, **Zelinskaya, V. A.**

†*Venericardia camachoi* **sp. nov.** p. 9, pl. 1, fig. 1; Tertiary, Arroyo Verde, Patagonia, Argentina, **Garcia, E. R. de**; *V.* (*Cyclocardia*) *chichibuensis* **sp. nov.** p. 172, pl. 2, figs. 13a–b; Mt. Kannonyama, Hio, Ogano-machi, Upper Oligocene *V.* (*C.*) *araii* p. 173 **sp. nov.** pl. 3, fig. 9, Tomita Japan, Oligocene, **Kanno, S.**; *V.* (*Cyclocardia*) *elliptica* Takeda, *V.* (*C.*) *expansa* Takeda, and *V.* (*C.*) *ezoensis* Takeda, lectotypes designated pp. 147, 148, 151, **Oyama, Mizuno & Sakamoto.**

SPHAERIACEA

†*Batissa procera eriensis* **subsp. nov.** p. 98, text-f. 2a–c, from the Nakasato formation, Kida Mine, Nagasaki Prefecture, Japan, **Hayashi, Y.**

Byssanodonta paranensis Orb. figd. and notes on the genus, **Klappenbach, M. A.**

Corbicula fluminalis from Azerbaidjan, **Aliev, A. D.** (1); *C. japonica* and *C.* (*Corbiculina*) *leana* excretion of Keber's organ, **Kato, K.**

†*Corbicula* (*Batissa*) *hukayai* Otatume, lectotype designated p. 160, **Oyama, Misuno and Sakamoto.**

†*Cyrena wikulowskiensis* p. 208, pl 1., f. 1–3, Vikulov region; *C. subcaudata* p. 209, pl. 1, f. 4, Turgaisk region; *C. carinatoides* p. 210, pl. 1, f. 5, Ryavkinsk region; *C. pseudocredneri* p. 211, pl. 1, f. 6–7, Turgaisk; *C. uvatica* p. 214, pl. 1, f. 9, Uvata region; *C. plana* p. 218, pl. 1, f. 15, Pokrovsk region; *C. subovalis* p. 219, pl. 1, f. 16, Pokrovsk region; **spp. nov.** Lower Cretaceous, Western Siberia, U.S.S.R., **Martinson & Velikzhanina.**

†*Eomiodon chumphonensis* **sp. nov.** p. 284, text-figs. 1, 2; ? Jurassic, Argillaceous sandstone at the mouth of the Chumphon River, Krah Isthmus, S. W. Thailand, **Hayami, I.** (5).

Eupera platensis Doello-Jurado figured and notes on the genus, **Klappenbach, M. A.**

†*Filosina jusanhamensis* **sp. nov.** p. 15, pl. III, figs. 1–7; text-fig. 1; (Wealden) Lower Cretaceous; Monou County, Miyagi Prefecture, Japan, **Hayami, I.** (1).

Pisidium casertanum, P. ponderosum, P. personatum, P. obtusale, P. milium, P. subtruncatum, P. lilljeborgi, P. nitidum, P. tenuilineatum and *P. vincentianum* general notes from Armenia, **Akramovskii, N. N.**; *P. moitessierianum* comparison of recent and Pleistocene populations, **Brodniewicz, I.** (2); *P. amnicum* trematode parasites, **Chernogorenko, M. I.**; *Pisidium* nine Roumanian species discussed and figured, **Grossu, A. V.** (1); *P. artifex* **sp. nov.** p. 68, text-f. 1–17, Kenya, **Kuiper, J. G. J.** (1); *Pisidium* of Portugal in the Locard Collection – A Revision, **Kuiper, J. G. J.** (2); *P. subtruncatum recalvum* **subsp. nov.** p. 221, figs. 11–19; Lake Ochrid; *P. edlaueri* **sp. nov.** p. 224; figs. 1–10; Lake Ochrid: Macedonia, **Kuiper, J. G. J.** (3); *Pisidium* spp. from Upper Volga dam, **Mitropolskii, V. I.**; *Pisidium* n. sp. and *P. subtruncatum* n. ssp. p. 357, mentioned in appendix from a letter by J. G. J. Kuiper to the author, **Stanković, S.**; *P. ultramontanum* zoogeographic study of distribution, **Taylor, D. W.** (1); *P.* (*Neopisidium*) *cavernicum* in Muikagâ cave, Miyako Island, Okinawa, Japan, **Torii, H.**

Sphaeriidae, list of Austrian species with distribution notes and synonymy, **Klemm, W.** (3).

Sphaerium rivicola parasitized by trematodes, **Chernogorenko, M. I.**; *Sphaerium* from the Upper Volga dam, **Mitropolskii, V. I.**

ISOCARDIACEA

†*Isocardia aegyptiaca* **sp. nov.** p. 470, pl. 3, figs. 3a, b, c; N. of Alluvial working in Wadi Abu 'Agag and 11.5 kms E. of Aswan, **Cox, L. R.** (7); *I. kumsuatense* **sp. nov.** p. 301, pl. 2, f. 14–15; Kintykche region, Western Pre Aral, U.S.S.R., Tertiary, Aral beds, **Ilyina, A. P.** (1).

†*Jahnia* **nom. nov.** for *Isocardia* Barrande 1881 p. 50, genolectotype *Isocardia bohemica*, synonym *Isocardia* Barrande 1881, non *Isocardia* Lamarck 1799, **Růžička & Prantl.**

CYPRINACEA

Cyprina islandica from Quaternary sediments in the Mediterranean, **Mars & Picard.**

†*Cyprina humei* **sp. nov.** p. 471, pl. 3, figs. 2a, b; N. of alluvial working in Wadi Abu 'Agag and 11. 5 kms. E. of Aswan, **Cox, L. R.** (7).

†*Kalentera marwicki* **sp. nov.** p. 78; text-figs. 3–6; Triassic, Awakino, New Zealand, **Grant-Mackie, J. A.**

†*Libitina transcarpatica* **sp. nov.** p. 23, pl. III, figs. 1–4 Middle Miocene, Marmaroskaky depression, Trans-Carpathia, **Korobkov, I. A.** (1).

†*Pronoella* ? *jefrensis* **sp. nov.** p. 99, pl. XII, fig. 1; Tacbàl formation Jurassic Jefren Tripolitania, **Desio, Ronchetti & Invernizzi.**

†*Rzehakia socialis longiuskula* **var nov.** p. 14 (in a table) Miocene, Kaspi Mts. Georgia, U.S.S.R., **Kereselidze, D. G.**

†*Somarctica* **subgen. nov.** p. 288, of *Arctica; Arctica* (*Somarctica*) *abukumensis* **sp. nov.** p. 290, pl. 33, figs 25–28; Nakanosawa formation, Japan, Jurassic, **Tamura, M.** (1).

†*Venilicardia flemingi* **sp. nov.** p. 39, pl. 3, figs. 1a, b, 2; Foa and Moindou basins New Caledonia, Cretaceous, **Freneix, S.** (1).

CYAMIACEA

Cyamiacea study on the hinge line, **Chavan, A.**

Notolepton atlanticum **sp. nov.** p. 22, pl. III, figs. 26–29, text-figs. 5–7; Julia Point, Tristan da Cunha, **Soot-Ryen, T.**

DREISSENACEA

†*Congeria pseudo-theodori* p. 14, *C. caspiensis* p. 14 **spp. nov.** (in a table) Miocene, Kaspi Mts. Georgia,

U.S.S.R., **Kereselidze, D. G.**; *C. praebalatonica* **sp. nov.** pp. 106, 123, pl. 3, figs. 4a–c; Mirijevo; *C. partschi elongata* pp. 107, 121; pl. 4, figs. 3a–c; *C. subglobosa mlavica* pp. 108, 121; pl. 5, figs. 1a–c; **subspp. nov.** Aleksandrovac, Tertiary, **Miletić-Spajić, O.**

Dreissena distincta important in the central Caspian benthos, **Romanova, N. N.**; *D. polymorpha* spread and importance in the fauna of Estonia, **Timm, T.**; *D. polymorpha* reproductive cycles and sex diagnoses, **Vlastov & Kochanova** *in* **Zhadin, V. I. et al.**

†*Dreissena polymorpha* from Rybinsk area, Yaroslav, U.S.S.R., Quaternary, **Novsky, V. A.**

Dreissensia polymorpha accumulation of I^{131} in organs, **Glaser, R.**

LUCINACEA

Codakia costata hinge and ligament structures, **Allen, J. A.** (3).

†*Corbis scarsellai* **sp. nov.** p. 56, pl. 3, figs. 5, 6; Cugnam Quoscè, E. Africa, Jurassic, **Jaboli, D.**

Diplodonta punctata hinge structure and ligament, **Allen, J. A.** (3).

†*Diplodonta* (*Zemysina*) *densiscalpta* **sp. nov.** p. 14, pl. 1, figs. 6, 7, Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J.** (1).

†*Divaricella castelensis* **sp. nov.** p. 35, pl. 3, figs. 2a–c; Miocene, Castelo, Fortaleza Is., Pirabas Bay, Para, Brazil, **Ferreira & Cunha.**

Joannisiella nomurai **sp. nov.** p. 290, type locality: Tomioka, Amakusa, Kumamoto Pref., distribution: Issiki, Aichi Pref. **Habe, T.** (4).

Loripes lucinalis hinge structure of the valves and ligament structure, **Allen, J. A.** (3).

†*Lucina cossmanni* **nom. nov.** p. 102, pl. XII, figs. 2–5; for *Phacoides orbignyanus* Cossmann 1907, Tacbal fm., Jurassic, Jefren Tripolitania, **Desio, Ronchetti & Invernizzi**; *L. glauca* **sp. nov.** p. 10, pl. 1, fig. 2; Tertiary, Arroyo Verde, Patagonia, Argentina, **García, E. R. de.**; *L. hasei* **sp. nov.** p. 76, pl. 8, figs. 6–8; Lias, Takayama, Japan, **Hayami, I.** (4); *L. cecchii* **sp. nov.** p. 54, pl. 7, fig. 2; Giarsagorò and Cugnan Quoscè, E. Africa, Jurassic, **Jaboli, D.**

†*Lucinoma tomitensis* **sp. nov.** p. 174, pl. 2, figs. 1–2; Tomita, Chichibu-city, Japan, Oligocene, **Kanno, S.**

Mytiliopsis leucophaeta 9 collected from Texas, **Branson, B. A.**

†*Paracyclas orbiculata* **sp. nov.** p. 371, pl. XIX, fig. 10; Morumbateman, Yass, N. S. Wales, Silurian, **Sherrard, K.**

Pillucina neglecta **sp. nov.** p. 282, figs. 7, 8 and 9; type locality, Tanabe Bay, Wakayama Pref., distribution: Nanao Bay, Ishikawa Pref., Obama Bay, Fukui Pref., Bingo Nada, Mie Pref., **Habe, T.** (3); *P. neglecta* **sp. nov.** nom. nud. Habe, p. 47, Tanabe Bay, Wakayama Pref., Japan, **Habe, T.** (5).

†*Schafhäutlia nakazawai* **sp. nov.** p. 211, pl. XIII, figs. 12–14; Triassic, Hirabarazaka and Shiraiwa, West Japan, **Tokuyama, A.** (2).

†*Sphaeriola nipponica* **sp. nov.** p. 74, pl 8, figs. 10–13; Lias, Higashinagano, Japan, **Hayami, I.** (4).

Thyasira flexuosa hinge and ligament structures, **Allen, J. A.** (3).

†*Thyasira opuchensis* **sp. nov.** p. 308, pl. 1, f. 4–8, Opuchinsk, coast of Bering Sea, north east U.S.S.R., Oligocene, **Ilyina, A. P.** (2).

ERYCINACEA

†*Cardinia orientalis* **sp. nov.** p. 70, pl. 7, fig. 1; Lias, Higashinagano, Japan, **Hayami, I.** (4).

Ephippodonta murakamii Kuroda, Ecological notes, figs. **Arakawa, K. Y.** (3).

Erycinacea study on the hinge line, **Chavan, A.**

Fronsella tanabensis **sp. nov.** [nom. nud.] Habe, p. 47, Tanabe Bay, Wakayama Pref. Japan, **Habe T.** (5).

Hyalokellia **gen. nov.** p. 290 of Erycinidae type-sp, *H. polita* **sp. nov.** p. 290, type locality Tomioka, Amakusa. Kumamoto Pref., **Habe, T.** (4).

Kellia minutissima **sp. nov.** p. 283, figs. 14, 15, 23 and 24; type locality Tanabe Bay, Wakayama Pref., **Habe, T.** (3); *K. minutissima* **sp. nov.** [nom. nud.] Habe, p. 47; Tanabe Bay, Wakayama Pref. Japan, **Habe, T.** (5).

Lasaea rubra responses and orientation, **Morton, J. E.** (3).

Melliteryx puncticulata flexuosa **subsp. nov.** p. 291, figs. 4, 5; type locality Obama Bay, Fukui Pref., distribution Tomioka Amakusa, Kumamoto Pref., **Habe, T.** (4).

Montacuta phascolionis commensal with *Phascolion strombi*, **Deroux, G.**

Mysella tanabensis **sp. nov.** p. 284, type locality: Tanabe Bay, Wakayama Pref., distribution: Tomioka, Amakusa, **Habe, T.** (3); *M. tanabensis* **sp. nov.** [nom. nud.] Habe, p. 47, Tanabe Bay, Wakayama Pref. Japan, **Habe, T.** (5).

Nipponomysella tanabensis p. 284, figs. 10 and 11; distribution Tomioka, Amakusa; Ushimado Okayama Pref. and Oura near Asamushi, Aomori Pref., *N. obesa* p. 285, figs. 4, 5 and 6; Tanabe Bay, Wakayama Pref., **spp. nov., Habe, T.** (3); *N. obesa* **sp. nov.** [nom. nud.] Habe p. 48; Tanabe Bay, Wakayama Pref. Japan, **Habe, T.** (5).

Rochefortula variabilis **sp. nov.** p. 29, pl. II, figs. 20–25; text-fig. 8; Julia Point, Tristan da Cunha, **Soot-Ryen, T.**

Scintilla vitrea (Quoy and Gaimard) Ecological notes, figs., **Arakawa, K. Y.** (2).

†*Spaniodontella gentilis adzhamurensis* **var. nov.** p. 114, f. 13, Adzhamur river, Imeretinskiy Khrebta, S. W. Georgia, U.S.S.R., Miocene, **Chikovani, A. A.**

CHAMACEA

†*Chama hayashii* **sp. nov.** p. 175, pl. 2, figs. 3a–b; Kuna-bridge, Tonumahara, Arakawamura, Japan, Miocene, **Kanno, S.**

†*Parasauvagesia* **gen. nov.** p. 428, of Radiolitidae, type sp. *P. cappadociensis* **sp. nov.** p. 428, pl. 61, pl. 62, fig. 2; text-fig 1; Campanian Cretaceous; S.W. of Cermik, Turkey, **Cox, L. R.** (3).

†*Plagioptychus ersi* **sp. nov.** p. 33, text-figs. 1–9; Campanian, Cretaceous Ariège, Pyrénées, France, **Astre & Baudelot.**

†*Praeradiolites gordonae* **sp. nov.** p. 432, pl. 62, figs. 1a-b; Campanian, Cretaceous, Ankara, Turkey, **Cox, L. R.** (3).

CARDIACEA

†Babinkidae **fam. nov.** p. 480 of Diplacophora q.v. genotype, *Babinka prima* p. 480, Osek near Rokycany, pl. 1, figs. 1, 2; Llanvirn, Ordovician, Bohemia, **Horný, R.**

Cardium edule development from fertilization of the ogg to metamorphosis completion, **Creek, G. A.**; *C. edule* growth and reproduction on the beaches of the " Ria de Vigo " **Figueras, A.** (1); *C. edule—Tellina tenuis* associa-

tion on Areiño beach, Spain, **Figueras, A. (3)**; *C. edule* var *maeotica* in the bottom fauna of the Molochnaya estuary, **Lubyanov, I. P.**; *C. edule* properties of the organic matrix of the shell, **Simkiss, K.**; *C. corbis* temperature, growth and mortality, **Taylor, C. C.**

†*Cardium naganoensis* **sp. nov.** p. 77, pl. 8, figs. 14, 15; Lias, Higashinagano, Japan, **Hayami, I. (4)**; *C.* (*Cerastoderma*) *helmerseni* **sp. nov.** p. 299, pl.1f. 1–9, Kara-Tomak, Western shore of Aral Sea, Kazakstan, Teritary, **Ilyina, A. P. (1)**; *C. minor* **sp. nov.** p. 54, pl. III, fig. 7; Oligocene, Vale, Akhaltsikhe Georgia, **Kacharava, I. V.**; *C.* (*Cerastoderma*) *levinae* **sp. nov.** p. 85, pl. VII, figs. 1, 2; Upper Oligocene, Kyzyl Kum, Uzbekskaya, **Merklin, R. L.**; *C.* (*Parvicardium*) *parvissimum* **sp. nov.** pp. 38, 127, pl. 1, figs. 7, 8, 10; Upper Tortonian (Miocene), Kiržaň massive "Slanské hory" mts., **Švagrovský, J.**; *C. tuba* **sp. nov.** p. 97, pl. 1, fig. 5; *C. rudis* **sp. nov.** p. 98, pl. 1, fig. 6; River Ewan, Tierra del Fuego, Paleocene, **Camacho, H. H.**

†*Clinocardium iwatense* p. 125 **sp. nov.** pl. 11, figs. 9, 10; Ochiai, N.E. Honshu, Japan, Pliocene, **Chinzei, K. (1)**; *C. subdecussatum* **sp. nov.** p. 216, pl. 25, figs. 9, 10, 12, 20; text-fig. IC; Tsuma member Miyazaki Group, Upper Miocene, Japan, **Shuto, T. (2)**.

†*Conocardium spinalatum* Rowley description and figures of the holotype, metatype and paratype, also figured *C. meekanum*, *C. peculiare* and *C. alaeforme*, **Branson, C. C. (1)**; *C.* cf. *C. inceptum* Hall 1859 from the Hunton Group, Silurian in Oklahoma, **Branson & Amsden**; *C. snideri* synonomy, description and photographs of the cotypes of Morgan's species, **Branson, C. C. (5)**; *C. aliforme minina* [as *minima* pl. 3, p. 26, and p. 29] **var. nov.** p. 28, pl. 3, f. 8, Lower Carboniferous, right bank of Ragusha river, N.W. Moscow basin, U.S.S.R., **Yanishevskii, M. E.**

†*Didacna catalaunica* **sp. nov.** p. 732; pl. XXXVI, figs. 9–11; Pliocene, Llobregat, Barcelona, Spain, **Gillet, S. (1)**.

Dinocardium robustum internal volume measurement, **Kornicker, L. S.**; *D. robustum* mobility when partially submerged, **Kornicker & Armstrong**.

†Diplacophora **ord. nov.** p. 479, class Pelecypoda, Babinkidae **fam. nov.** q.v. of Diplacophora, p. 480, **Horný, R.**

†*Eoprosodacna georgiensis* p. 14, *E. davidaschvilii* p. 14, *E. kotsachuriensis* p. 14, and *E. metechiensis* p. 14, (in a table) Miocene, Kaspi Mts., Georgia, U.S.S.R., **Kereselidze D. G.**

†*Hedecardium collinsi* **sp. nov.** p. 17, pl. 1, fig. 10; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J. (1)**.

†*Joachymcardium* **nom. nov.** p. 50, for *Cardium* Barrande 1881, genolectotype *Cardium cunctatum*, synonym *Cardium* Barrande 1881 non *Cardium* Linnaeus 1767, **Růžička & Prantl.**

†*Laevicardium decorticatum* typical Coralline Crag form in Suffolk, **Baden-Powell, D. F. W.**; *L. yoshidense* **sp. nov.** p. 176, pl. 2, figs. 5–7; Nenokami, Hikokubo, Yoshida-machi, Japan, Upper Oligocene, **Kanno, S.**; *L. pigmae* **sp. nov.** p. 219, pl. 25, figs. 11, 14, 15; text-fig. 1 D; Tano member, Miyazaki Group, Middle Miocene, Japan, **Shuto, T. (2)**.

†*Limnocardium neoinflatum* **nom. nov.** pro. *L. inflatum* Jekelius 1944 (non Gorjanović-Kramberger 1902) pp. 108, 122; pl. 7, figs. 12a, b; Aleksandrovac, Tertiary, **Miletić-Spajić, O.**

†*Lunulicardium quedongensis* **sp. nov.** p, 363, pl. XIX, fig. 6; Quedong near Bombala, N. S. Wales, Silurian, **Sherrard, K.**

†*Metadacna* **subgen. nov.** of *Prosodacna* q.v., **Eberzin, A. G. (2)**.

†*Nemocardium ezoense* Takeda and *N. yokoyamai* takeda, lectotypes designated p. 175, **Oyama, Mizuno and Sakamoto.**

†*Pachydacna natella* p. 125, pl. 23, f. 1–13, **sp. nov.**; *P. n. natella* p. 129, pl 13, f. 1–10; *P. n. pseudocimmerica* p. 130, pl. 13, f. 11; *P. n. extenuis* p. 130, pl 13, f. 12, 13;. **subspp. nov.**: *P. transilis* p. 131, pl. 23, f. 14–23; *P. levigata* p. 135, pl. 25, f. 1–3; all from Duab river, Abkhaziya, Georgia, *P. odischiensis* p. 140, pl 25, f. 9–13; Nodzhikhevi, Mingrelii, Western Georgia; *P. azovica* p. 143, pl. 25, f. 14–23, Akmanai, Kerchenski, Crimea; *P. supracimmerica* p. 149, pl. 24, f. 11–16, Tamansk, Bugazski region, Crimea; *P. kertschensis* p. 151, pl. 24, f. 17–21, Kerchensk, Crimea; *P. anapensis* p. 153, pl. 24, f. 22–24, Anapskaya, Kuban; *P. levis* p. 155, pl. 26, f. 1–10; **spp. nov.**; *P. l. levis* p. 157, pl. 26, f. 1–6; *P. l. curta* p. 158, pl. 26, f. 7–9; **subspp. nov.** Shakon river, Kuban; Pliocene, Ukraine and Georgia, U.S.S.R., **Eberzin, A. G. (2)**.

†*Prosochiasta* **subgen. nov.** of *Prosodacna* q.v., **Eberzin, A. G. (2)**.

†*Prosodacna* (*Prosodacna*) *littoralis semisulcatoides* p. 50, pl. 2, f. 5–8, Ingulets river basin, S. Ukraine; *P.* (*P.*) *semisulcata antiqua* p. 60, pl. 4, f. 1–4, Kamyshburun, Kerchensky, Crimea; *P.* (*P.*) *s. angustata* p. 62, pl. 6, f. 3, Galizgi river, Abkhaziya, Georgia; *P.* (*P.*) *macrodon subcrassidens* p. 78, pl. 11, f. 2–7, Yanysh-Takyl, Kerchensky; *P.* (*P.*) *longiuscula obliqua* p. 85, Pl. 14, f. 3–5, river Duab, Abkhaziya, Georgia; **subspp. nov.**; *P.* (*P.*) *misera* **nom. nov.** p. 63, for *Cardium* (*Limnocardium*) *semisulcatum* Rouss. var. *cucestiensis* Sinz. 1897 non Font.; *P.* (*P.*) *pseudocucestiensis* p. 65, pl. 7, f. 1, 2, Kamyshburun, Kerchensky, Crimea; *P.* (*P.*) *megalocephala* p. 79, pl. 13, f. 1–4, Varenikovskiy region, Shakon river, Kuban; *P.* (*P.*) *kitenica* p. 95, p. 19, f. 1–13, Kiten, Kerchensky Crimea; **spp. nov.** *P.* (*Prosodacnomya*) **subgen. nov.** p. 97, subgenotype: *P. rostrata* (Sinz.) Ukraine, Odessa; *P.* (*Prosochiasta*) **subgen. nov.** p. 103, s.g. type: *P. prosochiasta* Andrus, Galizgi river, Abkhaziya, Georgia; *P.* (*Metadacna*) **subgen. nov.** p. 105, s. g. type: *P. metoica* David, Duab river, Abkhaziya, Georgia; Pliocene, U.S.S.R., **Eberzin, A. G. (2)**.

†*Prosodacnomya* **subgen. nov.** of *Prosodacna* q.v., **Eberzin, A. G. (2)**.

†*Protocardia morii* **sp. nov.** p. 18; pl. III, figs. 11–15; (Wealden) Lower Cretaceous; Nagashioya, Miyagi Prefecture, Japan, **Hayami, I. (1)**; *P. onoi* **sp. nov.** p. 77, pl. 8, figs. 16–18; Lias, Higashinagano, Japan, **Hayami, I. (4)**.

†*Replidacna* used as a genus for young Limnocardiids, **Gillet, S. (2)**; *R.* Jekelius, note on this genus created for small *Limnocardium* with exaggerated hinge line development, **Gillet, S. (3)**.

†*Vasticardium kantoense* **sp. nov.** p. 176, pl. 2, figs. 4a–b; Shibahara, Arakawa-mura Japan, Lower Miocene, **Kanno, S.**; *V. hyuganum* **sp. nov.** p. 212, pl. 25, fig. 17; Tano member Miyazaki Group, Japan, Upper Middle Miocene, **Shuto, T. (2)**.

†*Vepricardium kyushuense* **sp. nov.** p. 210, pl. 25 figs. 7, 8, 18, 21, 22; text-figs. 1a, 2a,; Upper Middle Miocene, Kawabaru, Tano member Miyazaki Group, Japan, **Shuto, T. (2)**.

VENERACEA

Callista pilsbryi **sp. nov.** p. 291, type locality, Tomioka, Amakusa, Kumamoto Pref., distribution: W. coastof Kyushu, Shikoku and Pacific coast of Honshu, **Habe, T.** (4).

†*Callista* (*Costacallista*) *mitagensis* **sp. nov.** p. 188, pl. 4, figs. 3, 4; Mitagae, Ryokami-mura, Japan, Oligocene, **Kanno, S.**

Callocardia morrhuana suspension feeder from sediments of Buzzards Bay, Mass., **Sanders, H. L.** (2).

†*Chione* (*Gnidiella*) *trigona* **sp. nov.** p. 184, pl. 3, figs. 5–7; Kakkaku, Kurao, Ogano-machi Upper Oligocene, **Kanno, S.**

Crenocirce **subgen. nov.** of *Dorisca* q. v. p. 286, **Habe, T.** (3); *C. picta* **sp. nov.** [nom. nud.] p. 48; Tanabe Bay, Wakayama Pref., Japan, **Habe, T.** (5).

Cytherea meretrix introduction and establishment in Hawaiian waters, **Brock, V. E.**

Dorisca (*Crenocirce*) *picta* **subgen.** and **sp. nov.** p. 286, type locality Amami-Oshima, Kagoshima Pref., distribution Tanabe Bay and Shionomisaki, Wakayama Pref., **Habe, T.** (3).

†*Dosinia fujimotoi* p. 178, pl. 2, figs. 10–11; Mitagae, Ryokami-mura Upper Oligocene *D. shibaharensis* p. 180, pl. 2, figs. 12a–b; Shibahara, Arakawa-mura Lower Miocene **spp. nov.** Japan, **Kanno, S.**; *D. yamaguchie* **sp. nov.** p. 42, pl. 5; figs. 1, 2, 6; Chepotsunai River, Hokkaido, Japan, Sankebetsu formation, Miocene, **Kanno & Matsuno**; *D. castigata* **sp. nov.** p. 15, pl. 1, figs. 21–23; *Dosinia* (*Kereia*) **sp. nov.** p. 15, pl. 1, figs. 16–18; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J.** (1).

Macrocallista nimbosa from Alligator Harbor, Florida, **Akin & Humm.**

Mercenaria mercenaria cytochrome study of muscles, **Tappel, A. L.**

†*Mercenaria kurosawai* **sp. nov.** p. 181, pl. 3, figs. 1a–b; Kamanosawa, Ogano-machi, Japan, Miocene, **Kanno, S.**

Meretrix meretrix studies on shell formation, **Kado, Y.**; *M. meretrix lusoria* excretion of Keber's organ, **Kato, K.**; *M. lusoria* adductor muscle patterns, **Kawaguti & Ikemoto** (2).

†*Meretrix deguchii* **sp. nov.** p. 267; pl. 31, figs. 8a–b; Pliocene, Tungyuping, Pescadores Islands, Taiwan, **Hayasaka, I. & S.**

†*Periglypta hayakawai* **sp. nov.** p. 185, pl. 3, figs. 8a–c; Minezawa, Chichibu-city, Japan, Miocene, **Kanno, S.**

†*Pitar* (*Costellipitar*) *concentrica* **sp. nov.** p. 177, pl. 2, figs. 8–9; Arakawa-bashi, Arakawa-mura, Japan, Miocene, **Kanno, S.**; *P.* (*Pitarina*) *semeliformis* **sp. nov.** p. 135, pl. 14, figs. 1, 3; text-fig. 3a; Upper Miocene, Akatani, Takaoka machi, Higashi-morogata gun, Miyazaki Pref., Japan, **Shuto, T.** (1).

†*Pullastra* (*Paphirus*) **sp. nov.** p. 16, pl. 1, figs. 8, 9. Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J.** (1).

Saxidomus giganteus in vivo incorporation of 2-C^{14} acetate and sterol biosynthesis, **Fagerlund & Idler**; *S. giganteus* study of the effect of its poison, **Murtha, E. F.**; *S. giganteus* paralytic poison, **Schantz, E. J.**

†*Securella postostriata* **sp. nov.** p. 182, pl. 3, figs. 2–4; Chigaya, Yoshida-machi Japan, Upper Oligocene, **Kanno, S.**

Tapes pullastra chemical composition variations in specimens from Ria de Vigo, **Álvarez-Seoane, G.**; *T. decussatus* and *T. pullastra* growth and reproduction on the beaches of the "Ria de Vigo", **Figueras, A.** (1); *T.* (*Amygdala*) *japonica* excretion of Keber's organ, **Kato, K.**; *T. japonica* culture and observations concerning pinnotherid crabs as pests, **Sugiura, Sugita et al.**; *T. decussatus*, hepatopancreas cytological study, **Vasconcelos Frazao, J.** (1); *T. variegata* early life-history study, **Yoshida, H.**

†*Tapes* (*Siratoria*) *microsiratori* p. 186, pl. 4, fig.. 1–2; Yamagata, Minano-machi, *T. higuchii* p. 187, pl. 4, fig. 5; Hisakata Yoshida-machi **spp. nov.** Japan Oligocene, **Kanno, S.**

†*Turia fausta* **sp. nov.** p. 16, pl. 1, figs. 13, 14; Tertiary Otaio Gorge, South Canterbury, New Zealand, **Marwick, J.** (1).

Veneridae—ontogenetic development of the hinge in Black Sea forms, **Nevesskaya, L. A.**

Venerupis philippinarum introduced and established in Hawaiian waters, **Brock, V. E.**; *V. semidecussata* and the effect on it of waste products from Japanese refineries, **Fujiya, M.** (2); *V. philippinarum* studies on shell formation, **Kado, Y.**

Venus striatula (Costa) and predation by *Natica alderi* (Forbes), **Ansell, A. D.**; *V. mercenaria* digested away by *Asterias forbesi*, **Burnett, A. L.**; *V.* (*Mercenaria*) *mercenaria* effects of turbidity on eggs and larvae, **Davis, H. C.**; *V. mercenaria* isolated heart used to determine 5-hydroxytryptamine in tissue extracts, **Kottegoda, S. R.**

†*Venus arroyoensis* **sp. nov.** p. 97, pl. 1, fig. 4; River Ewan, Tierra del Fuego Paleocene, **Camacho, H. H.**

MACTRACEA

†*Longimactra flemingi* **sp. nov.** p. 14, pl. 1, figs. 9, 19, 20; Tertiary, Otaio Gorge, South Canterbury, New Zealand, **Marwick, J.** (1).

†*Lutraria nenokamiensis* **sp. nov.** p. 191, pl. 4, figs. 11–12; Nenokami, Hikokubo, Yoshida-machi Japan, Oligocene, **Kanno, S.**; *L. vindobonensis marmaroschica* **var. nov.** p. 15, pl. II, fig. 1; Middle Miocene, Marmarosksky depression, Trans-Carpathia, **Korobkov, I. A.** (1).

Mactra sulcataria and *M. veneriformis* amylase secreting cells in the crystalline style, **Kubomura, K.**; *M. veneriformis* maturation division of eggs, **Sawada, N.**; *M. eichwaldi crassa* p. 65, pl. 3, figs. 5–7; Mangyshlak; *M. crassicolis pseudocaspia* p. 66, pl. 3, figs. 8–10; Mangyshlak; *M. c. pseudonalivkini* p. 67, pl. 3. figs. 11–15; Ustyurt (Sarmatian) Miocene **subsp. nov.** Kazakhstan, **Sidorova, N. P.** (2).

†*Mactra miocaenica* **sp. nov.** p. 109, pl. 6, f. 7–9, Miocene, Loire Basin, **Dollfus & Dautzenberg**, Mém. Soc. géol. France No. 27 Paleont, **11**, 1904; *M.* spp. phylogeny Sarmatian of Mangyshlak and Ustyurt, **Sidorova, N. P.** (3).

†Mactridae, evolution of the hinge in Sarmatian forms, **Sidorova, N. P.** (1); Systematics of Sarmatian Mactridae, **Sidorova, N. P.** (4).

Rangia cuneata metabolism of sulphur amino-acids, **Allen & Awapara.**

Spisula sachalinensis effects of storing temperature on muscular nucleotide content, **Arai, K.**; *S. solida* isolated heart used to determine 5-hydroxytryptamine in tissue extracts, **Kottegoda, S. R.**; *S. solidissima* experimental study on egg cleavage rates, **Krane & Crane**; *S. solidis-*

sima aster-associated particles in cleaving eggs, **Rebhun, L. I.**; *S. solidissima* separation and isolation of embryo cells, **Strittmatter, C. F. & P.**; *S. solidissima* electron transport in eggs, embryos and adult tissues, **Strittmatter C. F. & P. and Burdick,**

†*Spisula yokoyamai* **sp. nov.** p. 189, pl. 4, figs. 6–10; Tebitsugauchi, Hino, Arakawa- mura, Japan, Lower Miocene, **Kanno, S.**; *S.* (*Hemimactra*) *mossbeachensis* **sp. nov.** p. 175, pl. 15, h; pl. 16, a; Merced formation Pillar Point, Pliocene, San Francisco peninsula, **Glen, W. (1).**

TELLINACEA

Abra (*Syndesmya*) *ovata* in the bottom fauna of the Molochnaya estuary, **Lubyanov, I. P.**

Cadella narutoensis **sp. nov.** p. 292, fig. 1, type locality: Naruto, Honshu distribution: Kyushu, Shikoku and Wakayama Pref. Honshu, **Habe, T. (4).**

Gari Schumacher 1817 proposal to place this generic name unemended on the Official List, type species by absolute tautonymy *Tellina gari* Linnaeus 1758, *gari* Linn. 1758 proposed for the Official List of Specific Names, *Gari faeroeensis* Dodge 1952 proposed as a Rejected Specific Name as an invalid emendation of *fervensis* Gmelin 1791, as published *Tellina fervensis*, **Cox, L. R. (1).**

Garum Dall 1900 proposal to be placed on Official List of Generic Names, type, *Psammobia dutemplei* Deshayes 1857; *dutemplei* Deshayes 1857 proposed for acceptance, **Cox, L. R. (1).**

Leptomya minuta **sp. nov.** p. 286, figs. 1–3; type locality Tanabe Bay, Wakayama Pref., distribution Yura Bay and Bingo Nada, **Habe, T. (3)**; *L. minuta* **sp. nov.** nom. nud. Habe, p. 50; Tanabe Bay, Wakayama Pref., Japan, **Habe, T. (5).**

Leptomyaria **gen. nov.** p. 287 of Semelidae type-sp. *L. trigona* **sp. nov.** p. 287, figs. 21, 22; type-locality Tomioka, Amakusa; distribution Tanabe Bay, Wakayama Pref., **Habe, T. (3)**; *L. triga* **sp. nov.** nom. nud. Habe, p. 50; Tanabe Bay, Wakayama Pref., Japan, **Habe, T. (5).**

Macoma baltica as an important component of the bottom fauna of Airisto Sound, Finland, **Tulkki, P.**

†*Macoma calcarea yokohamaensis* **subsp. nov.** p. 305, pl. 34; figs. 15–17; text-fig. 2; Nakazato formation Pliocene, Bessho-machi, Yokohama City, Japan, **Aoki, N.**; *M. orbiculata* **sp. nov.** p. 192, pl. 4, figs. 13–14; Kakkaku, Ogano-machi Japan, Upper Oligocene, **Kanno, S.**; *M. optiva* (Yokoyama) lectotype designated p. 198, **Oyama, Mizuno & Sakamoto.**

†*Pleuromya* ? *ruikiensis* **sp. nov.** p. 9, pl. 1, figs. 7a–c; Stanleyville beds, Mesozoic, Ruiki River, Belgian Congo, **Cox, L. R. (8).**

Psammobia feroensis Lamarck 1818, proposed as Rejected Specific Name as an invalid emendation of *fervensis* Gmelin 1791 as published *Tellina fervensis*, **Cox, L. R. (1).**

Psammobiadae Fleming 1828 proposed rejection as an invalid spelling of Psammobiidae type genus *Psammobia* Lamarck 1818, **Cox, L. R. (1).**

Psammobiidae Fleming 1828 proposed acceptance as a valid emendation of Psammobiadae type genus *Psammobia* Lamarck 1818, **Cox, L. R. (1).**

Tellina fervensis Gmelin 1791 proposed for the Official List of Specific Names, *T. ferröensis* Roding 1798, *T. ferroensis* Fleming 1813, proposed rejection as specific names as invalid emendations of *fervensis* Gmelin 1791 as published in the binomen *Tellina fervensis*, **Cox, L. R. (1)**; *Tellina tenuis—Cardium edule* association on Areiño beach, Spain, **Figueras, A. (3).**

SOLENACEA

Ensis siliqua in large numbers on Gann Flat, Dale, Pembs., **Bassindale & Clark.**

†*Leptosolen japonicus* **sp. nov.** p. 106, pl. 6, figs. 3–6; Izumi Mt. Range Takakura-san, Isumi-dani, Awaji Island Hansanji, Cretaceous Japan, **Ichikawa & Maeda.**

†*Siliqua bogatchevi* **sp. nov.** p. 50, pl. II, fig. 28; Oligocene, Vale, Akhaltsikhe, Georgia, **Kacharava, I. V.**; *S. kozakurica* **sp. nov.** p. 158, pl. 1, figs. 1–3; Kotzakhurskoi; *S. k. metechensis* **var. nov.** p. 161; pl. 1, fig. 4; Metechi; Tertiary Georgia, **Kvaliashvili, G. A. (1)**; *S. ryokamiensis* **sp. nov.** p. 194, pl. 4, figs. 16–18; Mitage, Ryokami-mura Japan, Oligocene, **Kanno, S.**

Stephopoma mamillatum **sp. nov.** p. 28, pl. 1, figs. 1–2; text-figs. 1, 2, 5–7, 13, 14; off Gorée, Senegal, 27 fms. Eastern Atlantic, 15° 30′N, 17° 15′ W., **Morton & Keen.**

†*Solen saitamensis* **sp. nov.** p. 193, pl. 4, fig. 15; Mitage, Ryokami-mura Japan, Upper Oligocene, **Kanno, S.**

SAXICAVACEA

†*Hiatella sakhalinensis* (Takeda) lectotype designated p. 207, **Oyama, Mizuno & Sakamoto.**

Panomya arctica from Quaternary sediments in the Mediterranean, **Mars & Picard.**

†*Panomya elongata* **sp. nov.** p. 195, pl. 4, fig. 19; Chigaya, Yoshida-machi, Japan, U. Oligocene, **Kanno, S.**

†*Panope fuequensis* **sp. nov.** p. 97, pl. 1, fig. 3; River Ewan, Tierra del Fuego, Paleocene, **Camacho, H. H.**

MYACEA

†*Asthenotoma* (*Asthenotoma*) *micrometrica* **sp. nov.** p. 121, pl. 7, fig. 37; Casa i Gessi, Rep. S. Marino, Tertiary, **Moroni, M. A. (2).**

Corbula, notes on taxonomy, **Burch, J. Q. (2).**

†*Corbula matsumotoi* p. 322, pl. XXXIX, figs. 5a–d, 6a–d, 7–9, 10a, b, 11a, b, 12–21; text-fig. 6a, b; Ryoseki group at Saka-yori-kami, Kawamata-mura, Kumamoto Pref., *C.* (?) *imamurae* p. 324, pl. XXXVII, figs. 16–21, 22a, b; pl. XXXIX, figs. 2–4; **spp. nov.** Kawaguchi formation of the Ryoseki group Yatsushiro-gun, Kumamoto Prefecture, Mesozoic, Japan, **Hase, A.**; *C.* (*Caryocorbula*) *drumcliffensis* **sp. nov.** p. 106, figs. 7, 8; Upper Calvert (Choptank) formation, Miocene; Drum Cliffs, Maryland, **Oleksyshyn, J.**

Mya arenaria habitat, and presence of *Escherichia coli* and *Clostridium perfringens*, **Lear, D. W.**; *M. truncata* from Quaternary Sediments in the Mediterranean, **Mars & Picard**; *M. arenaria*, ecology in a salt water pond, Martha's Vineyard Mass., **Matthiessen, G. C. (1)**; *M. arenaria* intertidal zonation Quincey, Mass., **Matthiessen, G. C. (2)**; *M. arenaria* survey of populations in Somerset County, Maryland, **Pfitzenmeyer, H. T. (1)**; *M. arenaria* plasmalogen structure, **Rapport & Alonzo.**

†*Mya opuchensis* p. 309, pl. 1, f. 11, Opuchinsk, Oligocene, *M. apukensis* p. 312, pl. 2, f. 4, Apuka river, Oligocene?; **spp. nov.** Tertiary. Koryakskiy Khrebet, N. E. Russia, **Ilyina, A. P. (2)**; *M. hasimtoi* **sp. nov.** p. 197, pl. 5, figs. 1a–b; Shibahara, Arakawa-mura, Japan, L. Miocene, **Kanno, S.**

Myalina ? *trigonalis* R. Etheridge jun. 1876, proposal to place *trigonalis* in this binomen on the Official List of Rejected Names under the Law of Priority, **Wilson, R. B. (2).**

ADESMACEA

Bankia indica distribution in Madras harbour, **Daniel, A. (1)**; *B. indica* settlement in relation to water currents, **Daniel, A. (2)**; *B.* (*Neobankia*) *osumiensis* **sp. nov.** pp. 70, 75; text-figs. 3a–d; pl. 1, figs. 13, 14; Kagoshima Prefecture, Japan, **Mawatari & Kitamura**; *B.* (*Liliobankia*) *campanellata*; *B.* (*Bankiella*) *carinata*; *B.* (*Plumulella*) *thielei* and *B.* (*P.*) *lineata* from Visakhapatnam harbour, Madras, **Nagabhushanam, R. (2)**; *B. campanellata* zonation in Visakhapatnam harbour, attacks greater with increasing depths of water, **Nagabhushanam, R. (3)**; *B. gouldi* effect of 50 toxic (mainly mercuric) compounds as control measures, **Nagabhushanam, R. (4)**.

Barnea candida cytoplasmic contents of an unsegmented egg, **Pasteels & Mulnard**; *B.* (*Anchomasa*) *elongata* **sp. nov.** pp. 68, 84; fig. 5; Oatow (Kwangtung); Sanya Kiungshan Kükow (île Hainan) China, **Thang, Tsi & Li.**

†*Barnea rustaviensis* **sp. nov.** p. 80, pl. 8, figs., 1, 2; Miocene, Georgia, U.S.S.R., **Zhgenti, E. M.**

†*Jouannetia hayashii* **sp. nov.** p. 198, pl. 5, figs. 3–4; Yamada, Chichibu-city, Japan, Miocene, **Kanno, S.**

Martesia striata and *M. fragilis* distribution and seasonal variation in Madras harbour, **Daniel, A. (1)**; *M. striata* settlement in relation to water currents, **Daniel, A. (2)**; *Martesia* and the effect of antifouling paints, **Nagabhushanam, R. (1)**; *M. striata* effect of 50 toxic compounds (mainly mercuric) as control measures, **Nagabhushanam, R. (4)**; *M. striata* inhibition by heavy fouling accumulation, **Nagabhushanam, R. (5)**; *M. striata* penetration of lead, **Springer & Beeman**; *M. pygmaea* **sp. nov.** pp. 75, 86; fig. 13; Fangcheng, Kisha (Kwangtung) China, **Thang, Tsi & Li.**

Monoplax **sect. nov.** pp. 72, 85; of *Pholadidea* Goodall, 1819, China, **Thang, Tsi & Li.**

Nausitora dunlopei from Visakhapatnam harbour, Madras, **Nagabhushanam, R. (2).**

Pholadidea (*Monoplax*) *dolichothyra* pp. 72, 85; fig. 9; Tangku, Sinkang (Hopei) *P.* (*M.*) *acutithyra* pp. 73, 85; fig. 10; **spp. nov.** Szetsiao (Chekiang) China, **Thang, Tsi & Li.**

†*Pholadidea kotakae* **sp. nov.** p. 42, pl. 4; figs. 10a–b; Tomamae district, Hokkaido, Japan, Chikubetsu formation, Miocene, **Kanno & Matsuno.**

Pholas dactylus histology of luminous glands, **Nicol, J. A. C. (1).**

Psiloteredo (*Phylloteredo*) *septa* **sp. nov.** pp. 72, 75; text-figs., 8a–d, 9c, pl. 1, figs. 3–12; Kagoshima Prefecture Japan, **Mawatari & Kitamura.**

Teredinidae from Venedig Lagoon, **Roch, F.**

PANDORACEA

†*Cercomya* ? *undosa* **sp. nov.** p. 10, pl. 2, figs, 2a, b; Stanleyville beds, Mesozoic, Lomami River, between Obenge Benge and Litoko, downstream from Pene Molalo, Belgian Congo, **Cox, L. R. (8)**; *C. bottegoi* **sp. nov.** p. 74, pl. 9, figs. 12a–c; Halle, E. Africa, Jurassic, **Jaboli, D.**

Cochlodesma praetenue ligament, **Allen, J. A. (2).**

Eudesmodontida **order nov.** p. 85 [in table] of subclass Heteroconchia to replace Allerismatacea, Laternulacea Clavagellacea and Pholadacea, in new Bivalvia classification scheme proposed by the author, **Cox, L. R. (9).**

†*Goniomya nonvscripta* **sp. nov.** p. 281, pl. 32, figs. 15–18; Nakanosawa formation, Jurassic, Japan, **Tamura, M. (2).**

Laternula japonica, artificial fertilization, **Kagawa, Y.**

Myadoropsis **gen. nov.** p. 293 of Myochamidae type-sp. *M. dissimilis* **sp. nov.** p. 293 type locality: W. coast of Tomioka, Amakusa, Kumamoto Pref., **Habe, T. (4).**

†*Neoburmesia iwakiensis* Upper Jurassic Japan, notes on structure and derivation, **Tamura, M. (2).**

†*Periplomya nagaoi* **nom. nov.** pro *Periplomya elliptica* Nagao and Otatume 1938; non Gabb 1862, Azenotani; *P. nagaoi brevis* **subsp. nov.** p. 103, pl. 6, figs. 7, 8a–c; Chikusa, Sumoto City; *P. grandis* **sp. nov.** p. 104, pl. 7, figs. 1a–d, 2a–c, 3; Kuroiwa Awaji Island; Takinoike Japan Cretaceous, **Ichikawa & Maeda.**

†*Pholadomya stefaninii* **sp. nov.** p. 70, pl. 9, figs. 7a–b, 8; Diredaua, Gildessa and Harar, Malca Balcad Gebiss, E. Africa, Jurassic, **Jaboli, D.**; *P. somensis* **sp. nov.** p. 279, pl. 32, figs. 10, 11; Nakanosawa formation Jurassic, Japan, **Tamura, M. (2).**

†*Thracia chigayensis* **sp. nov.** p. 197, pl. 5, fig. 2; Chigaya, Yoshida-machi Japan, U. Oligocene, **Kanno, S.**; *T. fukushimensis* **sp. nov.**. p. 290, pl. 33, figs. 8–10; Nakanosawa formation, Japan, Jurassic, **Tamura, M. (1).**

CEPHALOPODA

Recent

Cephalopoda: "Kingdom of the Octopus", 2nd. edit., **Lane, F. W.**; Structure and descriptions of Danish Cephalopoda, **Muus, B. J.**

Abralia japonica, and *A. veranyi* light organs and light emission, **Nicol, J. A. C. (2).**

Alloteuthis media from the Mediterranean coast of Spain, **Morales, E. (1).**

Argonauta argo from the Mediterranean coast of Spain, **Morales, E. (1)**; *A. argo*, feeding and general observations, **Young, J. Z. (4)**; *A. boettgeri* preys on *Cavolinia tridentata* (Forskål), figs., **Okutani, T.**

Calliteuthis celetaria **sp. nov.** p. 424, fig. 73a–h; Bermuda at a depth of 730–820 metres, **Voss, G. L. (1)**; *C. reversa* from the Mediterranean coast of Spain, **Morales, E. (1).**

Carynoteuthis **gen. nov.** of Taoniinae p. 434, type. sp. *C. oceanica* **sp. nov.** p. 434, fig. 75 a–f; Bermuda at a depth of 1,700 fathoms, **Voss, G. L. (1).**

Chiroteuthis veranyi new to the Mediterranean coast of Spain, **Morales, E. (1).**

Cirrothauma murrayi deep sea form with degenerate eyes, **Smith, F. G. W.**

Doryteuthis plei pore radius in the axolemma of the giant axon, **Villegas & Barnola.**

Dosidicus gigas chemical investigation of giant nerve fibres, **Deffner & Hafter.**

Eledone aldrovandi study of variations in length of specimens measured during a period of 2 years, **Morales, E. (3)**; *E. cirrhosa* muscle receptor organ, **Alexandrowicz, J. S. (1)**; *E. cirrosa* toxicity of saliva to crustaceans, **Ghiretti, F.**; *E. cirrosa* contribution towards its biology, **Morales & Bas (1)**; *E. cirrosa* numbers in the eastern Mediterranean, **Morales & Bas (2)**; *E. cirrosa* spawning in the Gulf of Naples, **Morales, E. (4)**; *E. moschata* and *E. cirrosa* from Cataluña, Spain, **Morales, E. (1).**

? *Enoploteuthis dubia* **sp. nov.** p. 12, Eylath, Gulf of Aqaba, Red Sea; fig. 2., **Adam, W. (4).**

Illex coindeti from the province of Gerona, Spain, **Morales, E. (1).**

Lepidoteuthis grimaldii mantle made up of scales, figs., **Clarke, M. R.**

Loligo brasiliensis temporary association with *Percophis brasiliensis*, **Castellanos, Z. A. de**; *L. edulis* luminescent symbiotic bacteria, **Nicol, J. A. C. (2.)**; *L. forbesi* teeth and radula fig'd. p. 81, **Muus, B. J.**; *L. pealii* respiration of the satellite cells of the giant nerve fibre, **Coelho, Goodman & Bowers**; *L. pealii* chemical investigation of giant nerve fibres, **Deffner & Hatter**; *L. pealii* retinal nerve and optic ganglion electrical responses, **MacNichol & Love**; *L. pealii* plasmalogen structure, **Rapport & Alonzo**; *L. pealii* and *L. opalescens*, nervous control of movement, **Wilson, D. M.**; *L. vulgaris* innervation of suckers on the sessile arms, **Graziadei, P. (1)**; *L. vulgaris* nervous system, **Graziadei, P. (5)**; *L. vulgaris* innervation of suckers of sessile arm, **Graziadei, P. (6)**; *L. vulgaris* innervation of the suctorial discs on the arms, **Graziadei, P. (7)**; *L. vulgaris* and *L. forbesi* from Blanes, Spain, **Morales, E. (1)**; *L. vulgaris* yolk structure and oology, **Orelli, M. v.**

Megalocranchia papillata **sp. nov.** p. 430, fig. 74 a–h; Bermuda at a depth of 500 metres, **Voss, G. L. (1).**

Meleagroteuthis hoylei chromatophore screening of bacterial light organs, **Nicol, J. A. C. (2).**

Notodarus gouldi large specimen from Tumby Bay, S. Australia, **Cotton, B. C. (3).**

Octopus shape discrimination experiments, **Deutsch & Sutherland**; *Octopus* sexual maturity determined by secretion released to the blood stream by the optic glands, **Wells, M. J. (1)**; *O. apollyon* and *O. bimaculatus* biochemical studies on salivary glands, **Hartman, Clark et al**; *O. bimaculatus* and *O. bimaculoides* nervous control of movement, **Wilson, D. M.**; *O. briareus* split arm abnormality, **Kumpf, H. E.**; *O. dofleini* lecithin and cephalin fractions, **Zama, Hatano et al.**; *O. macropus*, *O. cyaneus*, *O. aegina* collected from the Gulf of Aqaba, Red Sea, **Adam, W. (4)**; *O. salutii*, *O. tetracirrus* and *O. vulgaris* oology, **Orelli, M. v.**; *O. vulgaris* histoenzymological data on the digestive tract, **Arvy, L. (1)**; *O. vulgaris* histoenzymatic study of the alimentary canal, **Arvy, L. (2)**; *O. vulgaris* electron microscopic study of the white body, **Bolognari, A. (4)**; *O. vulgaris* functioning of statocysts, **Boycott, B. B.**; *O. vulgaris* breakdown of 3:5:3–triodo–L–thyronine in the hepatopancreas, **Covelli, Biasi & Tommaselli**; *O. vulgaris* toxicity of saliva, **Ghiretti, F.**; *O. vulgaris* hearing and the role of the statocyst, **Hubbard, S. J.**; *O. vulgaris*, *O. saluzzii*, *O.* (*Scaergus*) *unicirrus* and *O.* (*S.*) *tetracirrus* from Blanes, Spain, **Morales, E. (1)**; *O. vulgaris* proprioception and visual discrimination of orientation, **Wells, M. J. (2)**; *O. vulgaris* statocysts, **Young, J. Z. (1).**

Ocythöe tuberculata from the Mediterranean coast of Spain, **Morales, E. (1).**

Ommastrephes argentinus **sp. nov.** p. 55; text-figs. 1–6; off Argentina, **Ageitos de Castellanos, Z. J. (2)**; *O.* (*Illex*) *illecebrosa* spectrographic analysis, **Nicholls, Curl & Bowen**; *O. pteropus* distribution in the N.E. Atlantic, **Baker, A. de C.**; *O. sagittatus* from Blanes, Spain, **Morales, E. (1)**; *O. sagittatus* recorded off the Scottish coast, **Rae, B. B.**; *O. sloanei-pacificus* electrophysiological investigations of giant axon, **Lev, Nicolsky et al.**; *O. sloani pacificus* Steenstrup preparation of inosinic acid from mantle muscle, **Saito, Matsuyoshi et al.**; *O. sloani pacificus* amylase and esterase study, **Takahashi, T. (1)**; *O. sloani pacificus* seasonal variations in chemical composition of viscera, **Takahashi, T. (2)**; *O. sloani* lecithin and cephalin fractions, **Zama, Hatano et al.**

Ommastrephidae, heterocotyly types reviewed, **Adam, W. (2).**

Opisthoteuthis agassizii caught near Blanes (Costa Brava) at 670 metres, **Morales, E. (2).**

Pteroctopus tetracirrhus known from the Cape Verde Islands from 599 metres and caught off Algeria, **Dieuzeide, R.**

Rondeletia minor luminous light organ, **Nicol, J. A. C. (2).**

Rossia caroli general description caught off the coast of Algeria, **Dieuzeide, R.**; *R. macrosoma* from Blanes, Cabo de Creus and Cataluña, Spain, **Morales, E. (1)**; *R. macrosoma* yolk structure and oology, **Orelli, M. v.**

Sepia esculenta Hoyle mating habits, figs., **Arakawa, K. Y. (4)**; *S. esculenta* identification of races using the locular index, **Yagi, T.**; *S. officinalis* innervation of the hearts, **Alexandrowicz, J. S. (2)**; *S. officinalis* innervation of the alimentary canal, **Graziadei, P. (2)**; *S. officinalis* innervation of the anterior salivary glands, **Graziadei, P. (3)**; *S. officinalis* structure of the stellate ganglion cells, **Graziadei, P. (4)**; *S. officinalis*, *S. orbignyana* and *S. elegans* from the Mediterranean coast of Spain, **Morales, E. (1)**; *S. officinalis* eggs, **Müller, C. D.**; *S. officinalis*, *S. elegans*, and *S. orbignyana* oology, **Orelli, M. v.**; *S. officinalis* caught off the coast of Aberdeen, **Rae, B. B.**; *S. pharaonis* pl. 1; figs. 1–3; eggs, larvae and adults from the Gulf of Aqaba, Red Sea, **Adam, W. (4).**

Sepiola rondeletti from the Mediterranean coast of Spain, **Morales, E. (1)**; *S. atlantica*, *S. intermedia*, *S. birostrata*, *S. rondeletti*, symbiosis with luminous bacteria and light emission, **Nicol, J. A. C. (2).**

Sepioteuthis lessoniana pl. 1, figs. 4–8; eggs, larvae and adults from the Gulf of Aqaba, Red Sea, **Adam, W. (4).**

Symplectoteuthis oualaniensis fig. 1; study of the arm suckers, Gulf of Aqaba Red Sea, **Adam, W. (4).**

Thaumatolampas diadema light organs and light emission, **Nicol, J. A. C. (2)**; *T. diadema* deep sea luminous squid, **Smith, F. G. W.**

Todaropsis eblanae from Blanes, Spain, **Morales, E. (1).**

Watasenia scintillans chromatophore screening of brachial and mantle light organs, **Nicol, J. A. C. (2).**

Fossil

Systematics of Jurassic ammonites, **Beznosov, N. V.**; Ammonoidea, catalogue of species and varieties from Morocco, includes also a list of unnamed new species with their localities and references, **Colo & Petitot (1)**; Ammonoidea, generic names published 1758–1954, **Howarth, M. K.**; Ammonoidea systematics, general anatomy and conchometry, Mesozoic, **Krymgol'ts, G. Y.**; Systematics and phylogeny, **Müller, A. H.**; Ammonite classification problems, **Ruzhentzev, V. E. (3)**; Ammonite phylogeny; structure, development and terminology of suture lines, **Schindewolf, O. H. (1).**

NAUTILOIDEA

ELLESMEROCERATIDA

Albertoceras tchunense **sp. nov.** p. 37, pl. 5, fig. 1; Ordovician, Sibir' on the River Chunya, Kuznetsk, U.S.S.R., **Balashov, E. G. (1).**

Multicameroceras sibiriense **sp. nov.** p. 37, pl. 5, fig. 12; Ordovician, Sibir' on the River Chunya, Kuznetsk, U.S.S.R., **Balashov, E. G. (1).**

ENDOCERATIDA

Cameroceras proteiforme 10–15 ft. long shells from the Middle Ordovician, Minnesota, **Teichert & Kummel.**

Endoceras clarkei and *E. gracillimum* 750 and 670 mm. long respectively, **Teichert & Kummel.**

Vaginoceras undulatum **sp. nov.** pp. 268, 280, pl. 4, f. 1, 2. Lower Ordovician, Inner Mongolia, **Chang, Z.**

ACTINOCERATIDA

Armenoceras bachtense **sp. nov.** p. 38, pl. 5, fig. 19; Silurian, R. Bakhta, N. Siberia, **Balashov, E. G. (1).**

Elrodoceras smotritchense **sp. nov.** p. 38, pl. 5, fig. 16; Silurian, River Smotrich, Kamenets—Podolskaya province, Ukraine, **Balashov, E. G. (1).**

Gonioceras uralicum **sp. nov.** p. 39, pl. 5, fig. 10; Ordovician, River Kos'va Central Urals, U.S.S.R., **Balashov, E. G. (1).**

Huroniella arctica **sp. nov.** p. 39, pl. 5, fig. 3, Silurian, Kotel'nyy Island, New Siberian Islands, U.S.S.R., **Balashov, E. G. (1).**

Kionoceras arcticum **sp. nov.** p. 40, pl. V, fig. 9; Devonian Vostochnyy, Taim'ir, Siberia, **Balashov, E. G. (1).**

Lambeoceras kosvense **sp. nov.** p. 40, pl. 5, fig. 8; Ordovician, Central Urals, on the River Kos'va, **Balashov, E. G. (1).**

Ordosoceras **gen. nov.** Polydesmiidae pp. 262, 274. Genotype: *O. sphaeriforme* pp. 263, 275, pl. 6, f. 6a, b; *O. quasilineatum* pp. 263, 275, pl. 6, f. 3, 4; **spp. nov.** Inner Mongolia, Lower Ordovician, **Chang, Z.**

Ormoceras langkawiense **sp. nov.** p. 401, pl. 27, figs. 3a–b, 4a–b, 5a–b; Dendang, Langkawi Islands, Malaya, Ordovician, **Kobayashi, T. (3).**

Orthoceros comment on proposed stabilisation, **Shimansky, V. N. (2).**

Polydesmia zuezshanensis pp. 260, 272, pl. 1, f. 1, pl. 2, f. 2, pl. 3, f. 1; *P. yilehetoensis* pp. 261, 273, pl. 1, f. 2, 3; **spp. nov.** Lower Ordovician, Inner Mongolia, **Chang, Z.**

Wutinoceras lui **sp. nov.** pp. 264, 276, pl. 2, f. 3, pl. 3, f. 5. Lower Ordovician. Inner Mongolia, **Chang, Z.**

MICHELINOCERATIDA

Geisonoceras ievense **sp. nov.** p.41 pl. 5, fig. 4; Ordovician Estonia, **Balashov, E. G. (1).**

Geisonoceratidae **fam. nov.** p. 47 of Michelinoceratidae (super. fam. Flower 1945) to include *Geisonoceras* Hyatt 1884; *Geisonocerina* Foerste 1935; *Harrisoceras* Kobayashi 1934; *Sactorthoceras* Kobayashi 1934; *Sigmorthoceras* Kobayashi 1934; *Hedstroemoceras* Foerste 1930 and *Tretoceras* Salter 1858, **Zhuravleva, F. A.**

Harrisoceras volchovense **sp. nov.** p. 41, pl. 5, fig. 14; Ordovician, River Volkhov, Ukraine, **Balashov, E. G. (1);**

Hedstroemoceras saaremense **sp. nov.** p. 42, pl. 5, fig. 11. Ordovician Saarem'inza, Tapa, Estonia, **Balashov, E. G. (1).**

Mitorthoceras **gen. nov.** for *Orthoceras choctawense* Girty 1909; *O. crebriliratum* Girty 1909; *O. kildarense* Foord, 1896; and *Orthoceratites striolatus* von Meyer 1831; type. sp. *M. perfilosum* **sp. nov.** p. 136, pl. 27, figs. 1–4, 8; Utah, Carboniferous, **Gordon, M.**

Proclydonautilus kiparisovae **sp. nov.** p. 50, pl. 4, fig. 4; text-fig. 2; Triassic from the Chinyak and Kol'im'i Rivers, U.S.S.R., **Popov, Y. N. (1).**

Rayonnoceras foersti **nom. nov.** for *R. vaughanianum* Foerste and Teichert 1930 not Girty 1909 = *R. girtyi* Foerste and Teichert 1930; p. 133; pl. 27, fig. 5; Oklahoma; Carboniferous, **Gordon, M.**

Reticycloceras **gen. nov.** p. 134, for *Cycloceras kionoforme* Demanet 1941, *C. seguoyahense* Snider 1915 and *Orthoceras sulcata* Fleming 1815; type sp. *R. croneisi* **sp. nov.** p. 134, pl. 27, figs. 9–11; Arkansas, Carboniferous, **Gordon, M.**

Tofangocerina kolymensis **sp. nov.** p. 42, pl. 5, fig. 5; Silurian, Estonia, **Balashov, E. G. (1).**

ONCOCERATIDA

Danoceras fusiforme **sp. nov.** p. 45, pl. 5, fig. 6; Ordovician, R. Rakvere, Estonia, **Balashov, E. G. (1).**

Hemiphragmoceras zlobini **sp. nov.** p. 44, pl. 5, fig. 15; Vostochnyy Taim'ir on the river Nyun'karaku, Siberia, Devonian, **Balashov, E. G. (1).**

Oncoceras kegelense **sp. nov.** p. 44, pl. 5, fig. 13; Kegel'skii, Estonia, Ordovician, **Balashov, E. G. (1).**

Oocerina dnestrovensis **sp. nov.** p. 45, pl. 5, fig. 18, text-fig. 1; Silurian, R. Dnestr, Estonia, **Balashov, E. G. (1).**

DISCOSORIDA

Stokesoceras balticum **sp. nov.** p. 43, pl. 5, fig. 7; Silurian, Estonia, **Balashov, E. G. (1).**

Teichertia imitator p. 54, pl. 4, fig. 1; Pre Urals; *T. similis*, p. 55, pl. 4, fig. 2; Crimea; *T. pressa* p. 56, pl. 4, fig. 3; **spp. nov.** Tertiary Russia, **Shimansky, V. N. (1).**

Westonoceras estonicum **sp. nov.** p. 43, pl. 5, fig. 2; Ordovician, Tapa, Estonia, **Balashov, E. G. (1).**

TARPHYCERATIDA

Trocholites depressus life-time injuries in shells, **Stumbur, K. A.**

RUTOCERATIDA

Foordiceras akiyamai **sp. nov.** p. 90, pl. 11–12. Tagara, Miyagi Prefecture, Kitakami, Mts. Japan, Permian, **Hayasaka, I.**

Germanonautilus pensai **sp. nov.** p. 20, pl. I, figs. 2–4; pl. II, figs. 1–3; Valle di Prada, Italy, Triassic, **Ronchetti, C. R. (4).**

Leurotrochoceras stevensi to be added to the list of Hunton fossils of Oklahoma pub. June, 1956, **Amsden, T. W.**

Trochoceras asiaticum **sp. nov.** p. 46, pl. 5, fig. 17; Devonian, Turkestan, Asiatic Russia, **Balashov, E. G. (1).**

CENTROCERATIDA

Domatoceras planotergatum from Visean deposits, Walbrzych Miasto, Poland, **Zakowa, H. (2).**

Stenopoceras japonicum **sp. nov.** p. 123, pl. X, figs. 1a, b, 2; Permian, Tenjiṅoki near Maiya, Miyagi Pref., Japan, **Nakazawa, K. (1).**

NAUTILIDA

Angulithes (*Pseudocenoceras*) *dorsoplicatus* p. 176, Albanian, Escragnolles (Frankreich); *A.* (*Cimomia*) *stoliczkai* p. 177, pl. 22, fig. D; Ariyalur-Gruppe, Senonian; *A.* (*C.*) *schröderi* p. 180, pl. 21, fig. K; pl. 27, figs. 6–8; text-figs. 11-13; Cenomanian, Nocco near Villasana de Mena (Spain); *A.* (*A.*) *vascogoticus* p. 191, pl. 27, fig. 3; text-figs. 22, 23; Turonian, Puentedei (Spain); **spp. nov.** **Wiedmann, J.**

Aturia ackermanni **sp. nov.** p. 3, pl. 1, fig. 1; pl. 2, figs. 1–2; text-fig. 1; Capanema, Pará State, Brazil, Miocene, **Oliveira, P. E. de**; *A. minoensis* from the Miocene of W. Japan, **Kobayashi, T. (4)**; *A. yokoyamai* Nagao, lectotype designated p. 218, **Oyama, Mizuno & Sakamoto,**

Coelogasteroceras coxi p. 138 **nom. nov.** for *Nautilus canaliculatus* Cox 1858; not Eichwald 1857; Carboniferous Kentucky, **Gordon, M.**; *C. giganteum* **sp. nov.** p. 125, pl. X, figs. 3a, b, c; text-fig. 2; Akasaka limestone, Permian; Akasakamachi Gifu Prefecture, Japan, **Nakazawa, K. (1).**

Eutrephoceras angolaense p. 152, pl. 21, figs. E. F; Egito, Angola Campanian; *E. spengleri* p. 163, pl. 20; figs. G. K; Ootacoil Trichinopoly; *E. mertensi* p. 164, pl. 25, figs. 4, 5; pl. 26, figs. 5, 6; text-fig. 7; Ollobarren Navarra, Turonian; **spp. nov.** "*E. kummeli* n. n. (ex *Nautilus sublaevigatus* D'Orb. var *indica* Spengler)" pl. 20, figs. B–D; pl. 25, figs. 3, 6, 7; holotype *Nautilus bouchardianus* (D'Orb.) in Blanford 1861; p. 166; "*E. k. kummeli* n.n." p. 167; *E. k. angustum* **subsp. nov.** p. 167, text-fig. 8; Coniacian Zululand; *E. sphaericum geinitzi* **subsp. nov.** p. 171, Senonian, Madagascar, **Wiedmann, J.**

Indonautilus awadi **sp. nov.** pp. 288, *298*; pl. 1, figs. 1–5; pl. 2, figs. 9, 10; pl. 4, figs. 1, 2; Araif-el-Naga, Sinai and Makhtesh Ramon, Middle Triassic, **Kummel, B. (3).**

Nautilus izumocnsis from the Miocene of West Japan, **Kobayashi, T. (4).**

Peripetoceras whitei p. 137, pl. 27, figs. 6, 7; **nom. nov.** for *Nautilus missouriensis* (Swallow ?) White 1884, not *N. missouriensis* Swallow, 1858; Carboniferous, Indiana, **Gordon, M.**

APTYCHUS

Aptychus spp. systematics and structure, **Scatizzi, I.**

AMMONOIDEA

CLYMENIDA

Cymaclymenia borahensis **sp. nov.** p. 239, pl. 41, figs. 1–6; Wocklumeria zone Devono-Carboniferous boundary, N.S. Wales, **Pickett, J. W.**; *C. constricta* **sp. nov.** p. 166; pl. 27, figs. 8–10; *C. constricta globosa* **var. nov.** p. 167, pl. 27, figs. 14, 15; Stourscombe (West Quarry) nr. Launceston, Cornwall, Devonian-Carboniferous boundary **Selwood, E. B.**

Discoclymenia cornwallensis p. 174, pl. 28, figs. 22, 23; text-fig. 8; *D.* aff. *cornwallensis* p. 175, **spp. nov.** Stourscombe (West Quarry) near Launceston, Cornwall, Devonian-Carboniferous boundary, **Selwood, E. B.**

Falciclymenia cyrtostriata **sp. nov.** p. 543, pl. 9, f. 5, text-f. 19c., 20. Montó-Gebiet, León Province, Cantabrica Mts. Spain. Devonian, **Kullmann, J.**; *F. uralica* **sp. nov.** p. 72, pl. VII, fig. 3; Devonian, Urals. River Manya Kazakhstan, **Bogoslovsky, B. I.**

Kosmoclymenia pattisoni **sp. nov.** p. 165; pl. 27, fig. 1; Stourscombe (West Quarry) nr. Launceston, Cornwall; Devonian-Carboniferous boundary, **Selwood, E. B.**

Pachyclymenia intermedia **sp. nov.** p. 71, pl. VII, fig. 2; Devonian, Urals. Aktubinsk, Kazakhstan, **Bogoslovsky, B. I.**

AMMONITIDA

GONIATITINA

Anetoceras hunsrueckianum p. 52, pl. 2, fig. 9; text-fig. 9; Bundenbach; *A. advolvens* p. 56, pl. 2, figs. 10–11; pl. 3, figs. 1–4; text-figs. 12, 13; Chalonnes, (Maine-et-Loire) **spp. nov.** Devonian, **Erben, H. K.**

Axinolobus **gen. nov.** p. 149, for type. sp. *A. modulus* **sp. nov.** p. 149, text-figs. I–L, M; Oklahoma, Carboniferous, **Gordon, M.**

Bisatoceratinae **subfam. nov.** Miller and Furnish p. L60 of Goniatitidae for *Bisatoceras*, *Pennoceras* and *Nuculoceras*, Carboniferous, **Miller, Furnish & Schindewolf [in Moore].**

Clinolobinae **subfam. nov.** Miller & Furnish p. L67 of Adrianitidae for *Clinolobus*, Middle Permian, **Miller, Furnish & Schindewolf [in Moore].**

Convoluticeras **subgen. nov.** p. 67 of *Teicherticeras* **gen. nov.** Mimosphinctinae q.v. p. 63; subgenotype *T.* (*C.*) *lardeuxi* **sp. nov.** p. 68, pl. 5, figs. 2–7; text-figs. 15–16c; Devonian, Chalonnes (Maine-et-Loire), **Erben, H. K.**

Cyrtobactrites **gen. nov.** p. 35 of Bactritidae genotype *C. sinuatus* **sp. nov.** p. 36, pl. 1, fig. 4; text-fig. 6c; *C. asinuatus* **sp. nov.** p. 38, pl. 1, figs. 5a–c; text-figs. 6a–b; Schönauer Chalk Devonian, Lauterberg, **Erben, H. K.**

Dimeroceras lentiforme sobolevi **nom. nov.**, p. 511, 514 for *D. lentiforme* Sobolev-Nalivikina and *D.l.* Sobolev–Bogoslovsky, non Sobolev 1914, **Kullmann, J.**

Dunbaritinae **subfam. nov.** Miller and Furnish p. L67 of Adrianitidae for *Dunbarites* and *Emilites*, Carboniferous, **Miller, Furnish and Schindewolf [in Moore].**

Epiwocklumeria dunhevedensis **sp .nov.** p. 162; pl. 26, figs. 6, 7; text-fig. 2; Stourscombe (West Quarry) nr. Launceston, Cornwall, Devonian-Carboniferous boundary, **Selwood, E. B.**

Fayettevillea **gen. nov.** p. 146 type sp. *F. planorbis* **sp. nov.** p. 147, pl. 28, figs. 9–11; text-fig. 2; Arkansas, Carboniferous, **Gordon, M.**

Gephuroceras Hyatt 1884, proposed acceptance, type *Goniatites sinuosus* Hall 1843 (not to be given precedence over *Manticoceras* Hyatt 1884), **Miller, Furnish & Glenister.**

Gephuroceratidae (correction by Spath 1934 of Gephyroceratidae) Frech 1897 proposed for the Official List of Family Group Names, **Miller, Furnish & Glenister.**

Gephyroceras Carus 1884 proposed rejection as an unjustified emendation of *Gephuroceras* Hall 1884, **Miller, Furnish & Glenister.**

Gephyroceratidae Frech 1897 proposed as a Rejected Name as an incorrect original spelling of Gephuroceratidae **Miller, Furnish & Glenister.**

Goniatites choctawensis choctawensis type, figs. general study and geology, **Branson, Elias & Amsden**; *G. simulator* Hall 1874 and *G. sinuosus* Hall 1843 proposed addition to Official List of Specific Names, **Miller, Furnish & Glenister.**

Gyroceratites (*Lamelloceras*) **subgen. nov.** p. 78, q.v., **Erben, H. K.**

Homoceras beyrichianum Namurian study from Val Dieu–Asse region (Liège) Belgium, **Lambrecht & Leckwijck**; *H. moorei* **sp. nov.** p. 53; pl. III, (1) figs. 1–3; pl. IV (1) fig. 1; Val Dieu Belgium, Carboniferous, **Bouckaert, J.**

Hudsonoceras proteum, Namurian Fosse Sabatier, Valencienne region, North France, **Chalard, J. (2).**

Kenseyoceras **gen. nov.** of Cheiloceratidae p. 169; *Kenseyoceras* **subgen. nov.** p. 170; *K.* (*K.*) *rostrata* **sp. nov.** p. 171, pl. 28, figs. 4–10; text-fig. 5a; *K.* (*Mayneoceras*) *sinuconstricta* **subgen.** p. 171 and **sp. nov.** p. 173, pl. 28; figs. 18–20; Stourscombe Quarry, Nr. Launceston; Devonian–Carboniferous boundary, **Selwood, E. B.**

Lamelloceras **subgen. nov.** p. 78 of *Gyroceratites* subgenotype *G. dorsolamellatus* Erben 1953; *G.* (*L.*) *angulatus* **sp. nov.** p. 79, pl. 4, figs. 8–12; text-fig. 17; *G.* (*L.*) *dorsolamellatus armoricanus* **subsp. nov.** p. 85; pl. 4, figs. 1–6; text-figs. 18, 18a; Chalonnes, (Maine-et-Loire) Devonian, **Erben, H. K.**

Manticoceras Hyatt 1884, proposed acceptance, type *Goniatites simulator* Hall 1874 (given precedence over *Gephuroceras* Hyatt 1884 by Clarke 1899 as first reviser) **Miller, Furnish & Glenister.**

Mayneoceras **subgen. nov.** Cheiloceratidae p. 171, of *Kenseyoceras* q.v. p. 170; Launceston Cornwall, Carboniferous-Devonian boundary, **Selwood, E. B.**

Mimagoniatites erbeni p. 488, pl. 4, f. 3, 4, pl. 5, f. 1, text–fig. 5d, 7c; *M. tabuliformis* p. 492, pl. 4, f. 6, pl. 5, f. 2, text–fig. 7a, d. **spp. nov.** Cantabrica Mts., Palencia, Spain, **Kullmann, J.**; *M. obesus* **sp. nov.** p. 99, pl. 5, figs. 15–18; text–fig. 20; Chalonnes (Maine-et-Loire) Devonian, France, **Erben, H. K.**

Mimosphinctes cantabricus (MSS. G. Schulze) **sp. nov.** p. 483, text–fig. 5c, 6 b, c; Pls. 3, f. 2–7 and 4 f. 1. Devonian Cortes-Tales, Cantabrica Mts., Palencia, Spain, **Kullmann, J.**

Neoglyphioceras hyatti p. 139 **nom. nov.** [**sp. nov.**] for *Gastrioceras entogonum* (Gabb)? Hyatt 1891 not *Goniatites entogonus* Gabb 1862; Texas Carboniferous, **Gordon, M.**

Palaeogoniatites janus **sp. nov.** p. 114, pl. 6, figs. 1–2, 13; text-figs. 23, 24b; Chalonnes (Maine-et-Loire) Devonian, **Erben, H. K.**

Paracravenoceras **gen. nov.** p. 141, for *P. barnettense* Plummer and Scott, and *P. ozarkense* **sp. nov.** type sp. p. 143, pl. 28, figs. 12–15, 19–21, 29–31; text–figs. 1A, B, H.I.; Arkansas, Carboniferous, **Gordon, M.**

Parawocklumeria laevigata **sp. nov.** p. 167, pl. 27, figs. 16–20; text–fig. 4A; *P. laevigata obesa* **var. nov.** p. 169, pl. 28, figs. 1, 2; text–fig. 4B; Stourscombe (West Quarry) nr. Launceston, Cornwall, Devonian-Carboniferous boundary, **Selwood, E. B.**

Pericyclinae **subfam. nov.** Miller and Furnish p. L58 of Goniatitidae for *Pericyclus*, and *Ammonellipsites*, L. Carboniferous, **Miller, Furnish and Schindewolf** [**in Moore.**]

Prolecanites warreni **sp. nov.** p. 1127, pl. 141, fig. 6, text–fig. 3. Upper Mississippian, Junction between the Toad and Liard Rivers British Columbia, **Sellers & Furnish.**

Pseudobactrites péneaui **sp. nov.** p. 30, pl. 1, figs. 1a–e; text–fig. 4; La Grange near Chalonnes, (Maine-et-Loire) Devonian, **Erben, H. K.**

Pseudogastrioceras fortieri **sp. nov.** p. 75, Harker in Harker and Thorsteinsson; pl. XXIV, figs. 3–5; pl. XXV. figs. 1–3; Permian Grinnell Peninsula, Devon Island, Canada, **Harker & Thorsteinsson.**

Pseudoparalegoceras amotapense from the Carboniferous of Sierra Madre Oriental, S.W. Tamaulipas, Mexico, **Murray, Furnish & Carrillo.**

Pygmaeoceras **gen. nov.** p. 147; for *Gastrioceras pygmaeum* Mather 1915 and *G. sigma* Wright; type sp. *P. pygmaeum* p. 148, pl. 28, figs. 1–8, text–fig. 3; Arkansas, Carboniferous, **Gordon, M.**

Raymondiceras aktubense **sp. nov.** p. 70, pl. VII, fig. 1; Devonian, Urals Aktubinsk, Kazakhstan, **Bogoslovsky, B. I.**

Raymondiceratinae **subfam. nov.** Miller & Furnish p. L48, of Cheiloceratidae for *Raymondiceras* Schindewolf 1934, fig. 52, U. Devonian, **Miller, Furnish & Schindewolf** [**in Moore**].

Reticuloceras hodsoni **sp. nov.** p. 62, pl. I (IV), fig. 8; pl. III (III), fig. 2; pl. IV, (II), fig. 1; Val Dieu Belgium; Carboniferous, **Bouckaert, J.**

Sobolewia nuciformis abnormal growths from the Givetian Terebratum Zone at Pentonwarra Point, Trevone, N. Cornwall, **House, M. R.** (2).

Sporadoceras hispanicum **sp. nov.** p. 520, pl. 6, f. 5, text–fig. 14e, 15b. Montó-Gebiet, León Province, Cantabrica Mts. Spain, Devonian, **Kullmann, J.**

Sporadoceratinae **subfam. nov.** Miller and Furnish p. L49, of Cheiloceratidae for *Sporadoceras* Hyatt, *Discoclymenia* Hyatt and *Praeglyphioceras* Wedekind, U. Devonian, **Miller, Furnish & Schindewolf** [**in Moore**].

Strigogoniatites liuchowensis pp. 143, 154, pl. 2, figs. 10–12; Poholing; *S. nodosus* p. 144, 156; pl 2, figs. 7–8, text–fig. 4; Szefongtang **spp. nov.** Liukiang district, Kwangsi China, Permian, **Chao, K.**

Teicherticeras **gen. nov.** p. 63 of Mimosphinctinae; genotype *Gyroceratites desideratus; T.* (*Convoluticeras*) *lardeuxi* **subgen.** and **sp. nov.** q.v. p. 67; **Erben, H. K.**

CERATITINA

Acrochordiceras from the Middle Trias, Malaya, **Kummel, B.** (4).

Arcestes piaeformis **sp. nov.** p. 128, text–fig. 129, pl. 16, fig. 13; *A.* (*Proarcestes*) *tinkari* **sp. nov.** p. 122, text-figs. 119, 120, 121; pl. 17, fig. 6; pl. 18, fig. 1, Trias, Tinkar-Lipu (Nepal) Himalayas, **Jeannet, A.**

Balatonites rothei **sp. nov.** p. 330, text–fig. 1; pl. 22, figs. 1–3; Dornburg Thüringen, Lower Muschelkalk, Triassic, **Wunsch, L. P.**

Beyrichites migayi Kiparisova **sp. nov.** p. 208, pl. 9, fig. 4; Trias, Taimyr, genus see p. 36, **Luppov & Drushchitz** [**in Orlov**].

Ceratites origin in the Trias, *C. fritschi* **sp. nov.** ? suture line only figured, f. 51–7, p. 389, **Virgili, C.**

Cladiscites parenicus Popow **sp. nov.** p. 218, pl. 14, fig. 7; Trias, genus see p. 48, **Luppov & Drushchitz** [**in Orlov**].

Dieneroceras iwaiense and *Dieneroceras* sp. indet. from the Mid Scythian of Japan, **Kummel & Sakagami.**

Griesbachites [subgen] *gansseri* **sp. nov.** Haloritidae p. 55, text–fig. 50; p.. 11, fig. 5; pl. 12, fig. 5; [subgen. of *Juvavites* ?] Trias, Tinkar-Lipu (Nepal) Himalayas, **Jeannet, A.**

Gymnites (*Anagymnites*) *reichmuthi* **sp. nov.** p. 143, text–figs. 145, 146; pl. 20, fig. 5; Tinkar-Lipu (Nepal) Himalayas, Trias, **Jeannet, A.**

Hauerites ganzae **sp. nov.** p. 19, pl. 1, fig. 3; Upper Triassic, Wilczek Land, Frantz-Joseph Land, **Popov, Y. N.** (2).

Hedenstroemia borealis **sp. nov.** Popow p. 196 p.l III, fig. 5; Triassic, genus see p. 24, **Luppov & Drushchitz** [**in Orlov**].

Hellenites (?) *inopinatus* Kiparisova **sp. nov.** p. 216, pl. 13, fig. 9; Trias, genus see p. 44, **Luppov & Drushchitz** [**in Orlov**].

Hyattites (?) *nepalensis* **sp. nov.** p. 138, text–fig. 140, pl. 17, fig. 13; Trias Tinkar-Lipu (Nepal) Himalayas, **Jeannet, A.**

Hyattoceratinae **subfam. nov.** Miller and Furnish p. L53 of Popanoceratidae for *Hyattoceras* Gemmellaro 1887, M. Permian, **Miller, Furnish & Schindewolf** [in **Moore**].

Juvavites (*Anatomites*) *heimi* p. 108, text–figs. 104, 105; pl. 6, fig. 9; pl. 13, fig. 14; *J.* (*Molengraaffites*) *lombardi* p. 114, text–fig. 110, pl. 11, fig. 1; pl. 12, fig. 1; *J.* (*M.*) *welteri* p. 115, text–fig. 111, pl. 11, fig. 2; pl. 12, fig. 2; *J.* (*M.*) *sahnii* p. 116, text–figs. 112, 113; pl. 11, 3; pl. 12, fig. 3; *J.* (*M.*) *tinkari* p. 117, text–fig. 114; pl. 11, fig. 4, pl. 12, fig. 4; **spp. nov.** Trias, Tinkar-Lipu (Nepal) **Jeannet, A.**

Jovites sahnii **sp. nov.** p. 61, pl. 13, fig. 2; Trias, Balchdhura (Kiogar) Himalayas, **Jeannet, A.**

Kariceltites **gen. nov.** p. 40, Xenoceltitidae type species *K. indicus* **sp. nov.** p. 41, text–figs. 29, 30; pl. 7, figs. 10–12; pl. 8, fig. 15; Eotrias, Tinkar-Lipu (Nepal) Himalayas, **Jeannet, A.**

Kumaonites **gen. nov.** p. 42, Paranoritidae type species *K. collignoni* **sp. nov.** p. 42, text–figs. 31, 32; pl. 7, fig. 1; Eotrias, Colline de Kuti (Kumaon) Himalayas, **Jeannet, A.**

Leiophyllites praematurus Kiparisova **sp. nov.** p. 204, pl. 7, fig. 13; Trias, genus see p. 32, **Luppov & Drushchitz** [**in Orlov**].

Lipuites **subgen. nov.** p. 78, of *Sirenites*, subgenotype *L. totiae* **sp. nov.** p. 79, text–fig. 65, pl. 18, fig. 3; Trias, Tinkar-Lipu (Nepal) Himalayas, **Jeannet, A.**

Longobardites taimyrensis Kiparisova **sp. nov.** p. 196, pl. 3, fig. 8, Triassic, Taimyr, genus see p. 25, **Luppov & Drushchitz** [**in Orlov**].

Metussuria secreta Kiparisova **sp. nov.** p. 198, pl. 4, fig. 6; Trias, genus see p. 26, **Luppov & Drushchitz** [**in Orlov**].

Mongoloceras **gen. nov.** p. 110 Popanoceratidae; Genotype: *M. gobiense* **sp. nov.** pp. 110, *112* text–f. 1, 2. Usu-Khongor [= Hongor], Khongor-Ula, Mongolia. Upper Permian, **Ruzhentzev, V. E.** (2).

Otoceras indigirense **sp. nov.** p. 49, pl. 4, fig. 5; text–fig. 1A; Triassic, Indigirki Kerekyan Russia, **Popov, Y. N.** (1).

Owenites shimizui from the Mid-Scythian of the Iwai formation, Japan, **Kummel & Sakagami.**

Palaeophyllitidae Popow **fam. nov.** p. 32 of Meekocerataceae for *Eophyllites* and *Leiophyllites* Triassic, **Luppov & Drushchitz** [**in Orlov**].

Paraceratites trinodosus from the Anisian Triassic of Kuala Lipis, Pahang Malaya, **Kummel, B.** (4); *P. villaltae* **sp. nov.** p. 405, pl. 2, f. 1, 2, pl. 1, f. 4, 5. Triassic, Catalania, Spain; evolution of spp., pp. 586–590, **Virgili, C.**

Paranannites **sp.** indet. from the Triassic of Japan, **Kummel & Sakagami.**

Paratibetites tinkari p. 86, text–figs. 73, 74; pl. 15, fig. 7; pl. 16, fig. 9; *P. ganseri* p. 87, text–fig. 75; pl. 15, fig. 8; *P. arnoldi* p. 154, text–figs. 161, 162; pl. 11; fig. 9; pl. 21, fig. 3; *P. indicus* p. 155, text–figs. 163, 164, pl. 21, figs. 4–5; **spp. nov.** Trias, Tinkar-Lipu (Nepal) Himalayas *P.* (*Pseudotibetites*) **subgen. nov.** q. v., **Jeannet, A.**

Phormedites audeni **sp. nov.** p. 90, text–figs. 78, 79; pl. 15, fig. 5; pl. 16, fig. 6; Tinkar-Lipu (Nepal) Himalayas, Trias, **Jeannet, A.**

Pinacoceras habichti **sp. nov.** p. 139, text–figs. 141, 142; pl. 17, fig. 10; pl. 20, fig. 4; Tinkar Lipu (Nepal) Himalayas, Trias, **Jeannet, A.**

Preflorianites maritimus Kiparisova **sp. nov.** p. 206, pl. 8, fig. 3; Trias, genus see p. 35, **Luppov & Drushchitz** [**in Orlov**].

Protrachyceras batalleri **sp. nov.** p. 419, pl. 5, f. 7, 8. Triassic, Catalania, Spain, **Virgili, C.**

Pseudohedenstroemia Kummel **nom. nov.** p. 140; for *Anahedenstroemia* Spath 1934 non Hyatt 1900, **Arkell, Kummel & Wright** [**in Moore**].

Pseudosageceras multilobatum "var. nov." p. 30 [unnamed] text–fig. 12, pl. 6, fig. 1; Eotrias, Kuti Burg (Kumaon) Central Himalayas, **Jeannet, A.**

Pseudotibetites **subgen. nov.** p. 157 of *Paratibetites*, subgenotype *Pseudotibetites tinkari* **sp. nov.** p. 157, text–fig. 165, pl. 19, fig. 6; Tinkar-Lipu (Nepal) Himalayas, Trias, **Jeannet, A.**

Ptychites from the Middle Triassic of Malaya, **Kummel, B.** (4); *P. compressus hamadaensis* **subsp. nov.** p. 73, pl. 1, fig. 2; Taruda, Rifu-Mura, Miyagi-gun, Miyagi Pref., N.E. Japan, Trias, **Onuki & Bandô** (2).

Shengoceras **gen. nov.** pp. 141, 152; [no family given but may represent a keeled offshoot from a common ancestor with *Waagenoceras*] type species *S. lenticulare* **sp. nov.** pp. 142, 153, pl. 2, figs. 1–4, 5, 6; text–fig. 3; Permian, Poholing, Liukiang district Kwangsi, China, **Chao, K.**

Sirenites pirozhnikovi **sp. nov.** p. 17, pl. 1, figs. 2, 4, Upper Triassic, Wilczek Land, Frantz-Joseph Land, **Popov, Y. N.** (2); *S.* (*Lipuites*) q.v., *totiae* **subgen. & sp. nov.** p. 78, **Jeannet, A.**

Sturia sansovinii from the Middle Triassic of Malaya, **Kummel, B.** (4).

Sturiinae Kiparisova **subfam. nov.** p. 50 of Ptychitidae for *Sturia*, *Psilosturia* and *Metasturia* Triassic, **Luppov & Drushchitz** [**in Orlov**].

Styrites heimi **sp. nov.** p. 98, text–figs. 90, 91; pl. 13, fig. 17; pl. 15, fig. 4; Trias, Tinkar-Lipu (Nepal) Himalayas, **Jeannet, A.**

Thisbites indicus **sp. nov.** p. 91, text–figs. 80, 81, pl. 15, fig. 6; Trias, Tinkar-Lipu (Nepal) Himalayas, **Jeannet, A.**

Tropigastrites polaris Kiparisova **sp. nov.** p. 204, pl. 7, fig. 6; Trias, genus see p. 31, **Luppov & Drushchitz** [**in Orlov**].

Vishnuites spathi **sp. nov.** p. 35, text–figs. 16, 17; pl. 7, fig. 2; pl. 8, fig. 6; Eotrias Kuti Burg (Kumaon) Himalayas, **Jeannet, A.**

Waagenoceras simplex pp. 138, 149; pl. 1, figs. 1–11; text–fig. 1a–b; Felgnoling N.W. of Fenghuang Lapin district; *W. umbilicatum* pp. 139, 150; pl. 1, figs. 12, 13; text–fig. 2a; Szefongtang, Liukiang district; *W. shengi* pp. 140, 151, pl. 1, figs. 14, 15; pl. 2, fig. 13; text–fig. 2b; Poholing China Permian **spp. nov., Chao. K.**

PHYLLOCERATINA

Calliphylloceras benacense mandaranensis **var. nov.** pl. CXXXVI, fig. 516; Mandarana; *C. malakialinense* pl. CXXXVII, figs. 517, 518; Maizimazava; *C. complanatum* pl. CXXXVII, fig. 519; Reamilitzy; **spp. nov.** Madagascar (Tithonic) Jurassic, **Collignon, M.**; *C. nizinanum* **sp. nov.** p. 99, pl. 11, figs. 6–12; Chitina Valley, Alaska; Albian Cretaceous, **Imlay, R. W.** (1).

Holcophylloceras baraense **sp. nov.** pl. XCVIII, figs. 370 a–b; Belambo; Madagascar, (Kimmeridgian) Jurassic, **Collignon, M.**; *H. pseudosilesiacum* **sp. nov.** pl. CXXXVIII fig. 523, Mandarana; Madagascar, (Tithonic) Jurassic, **Collignon M.**

Leiophyllites see under Ceratitina.

Libycoceras afikpoense, Maestrichtian Cretaceous, internal structure, figs., **Reyment, R. A. (1).**

Libycoceratinae Michailov **subfam. nov.** p. 128 of Sphenodiscidae, for *Libycoceras*, *Prelibycoceras*, *Coahuilites* and *Indoceras* Coniacian to Maastrichtian, **Luppov & Drushchitz [in Orlov].**

Monophyllites aonis pl. XXIV fig. 1, from the Triassic of Východná, Czechoslovakia, **Rakus, M.**

Palaeophyllitidae Popow **fam. nov.** p. 32 of Meekoceratacae see under Ceratitina, **Luppov, & Drushchitz [in Orlov].**

Partschiceras adabofolense **sp. nov.** pl. XII; figs. 63, 63a, 63b; (Callovian) Jurassic; Adabofolo, Madagascar, **Collignon, M.**; *P. argoviense* **sp. nov.** pl. XLVII, fig. 225; Ambatomanandry; *P. madagascariense* **sp. nov.** pl. L. fig. 252; Andangovato; (Argovian) Jurassic Madagascar, **Collignon, M.**

Phylloceras duodecimsulcatum **sp. nov.** pl. XXXIV, fig. 162; Est. Ankirihitra (Oxfordian); *P. hindermeyeri* **sp. nov.** pl. CXXXIV, fig. 508; Sikily; Madagascar (Tithonic) Jurassic, **Collignon, M.**; *P. onoense* type species of *Hypophylloceras* redescribed and figured pl. 55, figs. 1–4; pl. 56, fig. 1; **Packard, E. L.**

Phylloceratacae, phylogeny, suture lines fig'd., **Schindewolf, O. H. (1).**

Phyllopachyceras beneckei sikilyensis **var. nov.** pl. CXXXV, fig. 513; Analavelona; *P. barrabei* pl. CXXXVI, figs. 514, 515; Marolalitra; Madagascar, (Tithonic) Jurassic, **Collignon, M.**; *P. chitinanum* **sp. nov.** p. 97, pl. 11, figs. 1–5; Chitina Valley, Alaska, Albian, Cretaceous, **Imlay, R. W. (1).**

Ptychophylloceras saint-oursi **sp. nov.** pl. XII, fig. 65; (Callovian) Jurassic; Andranomantsy, Madagascar, **Collignon, M.**

Sowerbyceras andrangoryense **sp. nov.** pl. XLIX, fig. 242; Andrangory; (Argovian) Jurassic Madagascar, **Collignon, M.**

LYTOCERATINA

Anahamulina wilcoxensis **sp. nov.** p. 200, pl. 25, figs. 2, 5, 6; Hauterivian Cretaceous, Pacific Coast States; California, **Imlay, R. W. (2).**

Ancyloceras mantelli **sp. nov.** p. 21, pl. I, fig. 3; pl. II, figs. 1a, b; pl. III, figs. 1–2; Atherfield Clay Series, Crackers Atherfield, Isle of Wight, Cretaceous, **Casey, R. (1).**

Ancyloceratacae, phylogeny, suture lines fig'd., **Schindewolf, O. H. (1).**

Anisoceras armatum, *A. sausureanum* and *A. exoticum* from the Cretaceous of Veliki Krivelj, Yugoslavia, **Antonijević, I.**

Crioceras reported occurrence in India, **Sarkar, S. S. (1).**

Idiohamites dorsetensis from the Cretaceous of Veliki Krivelj, Yugoslavia, **Antonijević, I.**

Kossmatella cappsi **sp. nov.** p. 99, pl. 12, figs. 17–22; Chitina Valley Alaska; Albian Cretaceous, **Imlay, R. W. (1).**

Leptoceras ubalaense **sp. nov.** p. 4; fig. 6; Lower Valanginian, Cretaceous, Ubalá, Cundinamarca, S. America, **Haas, O.**

Lytoceras sp. middle Lias, Gerecse Mts., Transdanubia; septa of abnormal structure, some convex others concave, **Jámbor, Á.**

Lytoceratacae, phylogeny, suture lines fig'd., **Schindewolf, O. H. (1).**

Lytoceratina, phylogeny, suture lines fig'd, **Schindewolf, O. H. (1).**

Mariella bergeri from the Cretaceous of Veliki Krivelj Yugoslavia, **Antonijević, I.**; *M.* (*M.*) *fricki* **sp. nov.** p. 848, pl. 103, fig. 7; Cottonwood Creek, California, Bald Hills formation Cretaceous, **Murphy & Rodda.**

Pterolytoceras sutile madagascariensis **var. nov.** pl. CXXXIX, fig. 529, 530, 531; Sikily; and Mandarana; pl. CXL, fig. 529b; *P. sikilyense* pl. CXLI, fig. 534; Sikily; *P. reamilitzyense* pl. CXLI, fig. 535; Reamilitzy, **spp. nov.**; Madagascar (Tithonic) Jurassic, **Collignon, M.**

Scaphitaceae, phylogeny, suture lines fig'd., **Schindewolf, O. H. (1).**

Spiroceratacae, phylogeny, suture lines fig'd., **Schindewolf, O. H. (1).**

Tropaeum bowerbanki densistriatum **var. nov.** p. 30, pl. VI, fig. 1; Ferruginous Sands, Atherfield; *T. drewi* p. 35, pl. VIII, figs. 1–2; pl. IX, fig. 1; text-figs. 10, 11f.; Hythe Beds, Hythe Kent; *T. benstedi* p. 37, pl. III, fig. 3; text-fig. 11g; Hythe Beds, Skinnner's Quarry near Maidstone, Kent; *T. subarcticum* p. 40, pl. VIII, figs. 3a–c; pl. X, fig. 1; text-figs. 11d, 12; Sandgate Beds, Redhill, Surrey; *T. keepingi* p. 42, text-figs. 11e, 13; Lower Greensand, Upware Cambridgeshire; *T. rossicum* p. 43, Upper Aptian, Coombe Quarry, Maidstone, **spp. nov.** Cretaceous, S.E. England, **Casey, R. (1).**

Turrilitaceae, phylogeny, suture lines fig'd. **Schindewolf, O. H. (1).**

Turrilites (*Turrilites*) *dilleri* **sp. nov.** p. 849, pl. 103, fig. 6; Bald Hills formation, Cretaceous; California, **Murphy & Rodda.**

Turrilitoides densicostatus from the Cretaceous of Veliki Krivelj, Yugoslavia, **Antonijević, I.**

? *Veleziceras* Wright **nom. nov.** p. 210 for *Orbignyiceras* Royo y Gomez 1945 non Gérard & Contaut 1936, **Arkell, Kummel & Wright [in Moore].**

Villaniinae Arkell **subfam. nov.** p. L 196 of Lytoceratidae for *Villania*, Middle Jurassic, **Arkell, Kummel & Wright [in Moore].**

AMMONITINA

Acanthoceras Neumayr 1875, age in the Cretaceous of South India and general description, **Sarkar, S. S. (2)**; *A. rhotomagense* zone of the British Upper Cenomanian (Cretaceous), **Casey, R. (4)**; *A. rhotomagense*—identified by Waagen from the Umia series of the Ukre beds of Cutch is probably a *Chelonicera* of the group *martini* D'Orbigny, **Sarkar, S. S. (3).**

Acanthohoplites sarasini from the Albian of northern Hanover, Germany, **Bartenstein, H.**

Aconeceras nisoides ? from Höllviken boreholes, Aptian, S. Sweden, **Reyment, R. A. (2).**

Alcidia rigida **sp. nov.** pl. X; figs. 53, 53a; Andranomavo; Madagascar (Bathonian) Jurassic, **Collignon, M.**

Amaltheus margaritatus, Upper Pliensbachian, Jurassic; internal structure figs., **Reyment, R. A. (1).**

Ammonites triplex, Jurassic, **Hölder, H.**

Amoeboceras piecarum **sp. nov.** pp. 411, 415, pl. 2, f. 10–15. Astartian, Piekary, Poznan, Poland, **Malinowska L.**

Anavirgatites (?) *franconicus* from the Cretaceous of Hainberg fig. **Zeiss, A. (2).**

Ankobites **gen. nov.** of Oppeliidae, *A. saint-oursi* **sp. nov.** pl. XXVIII, fig. 120; Callovian, Jurassic; Ours, Madagascar, **Collignon, M.**

Arcaspidoceras jeanneti **sp. nov.** pl. LXXXIII, figs., 332, 333, Ankazoabo, Madagascar; Argovian Jurassic **Collignon, M.**

Arctoasteroceras **gen. nov.** p. 13, of Asteroceratinae, type. sp. *Arctoasteroceras jeletzkyi* **sp. nov.** p. 14, pl. II, figs. 1–5; pl. III, figs. 1–3; Aklavik area Canadian Arctic; Sinemurian, Jurassic, **Frebold, H.**

Aspidoceras (*Intranodites*) *spathi* **sp. nov.** pl. XCIV, fig. 362, pl. XCV, fig. 363; Maroroka, Rauracian; *A. longispinum antsalovensis* **var. nov.** pl. CX, figs. 404, 405; Antsalova; *A. bussierei* pl. CXXIX, fig. 483, Belambo *A. bertucati* pl. CXXX fig. 486, Ampanihy sur Bevoay; *A. spinosum* pl. CXXXI, fig. 492, Sikily, Kimmeridgian **spp. nov.** Jurassic, Madagascar, **Collignon, M.**

Aulacosphinctes quadratus pl. CLXIX, fig. 708; *A. crassus* pl. CLXIX, fig. 711; Antsalova **spp. nov.** *A. spitiensis multicostata* **var. nov.** p. CLXX, fig. 712; *A. pauliani* **sp. nov.** pl. CLXX figs. 713, 714; *A. p. convexa* **var. nov.** pl. CLXX fig. 715; *A. retrocostatus* **sp. nov.** pl. CLXX, fig. 716; Antsalova; *A. occultefurcatas angustior* **var. nov.** pl. CLXX, fig. 717; Ambinanitelo; *A. natricoides obliqua* **var. nov.** pl. CLXXI, fig. 719; Antsalova; *A. morickei alta* **var. nov.** pl. CLXXI fig. 720, Ampanihy sur Bevoay; *A. laxicosta simplex*, **var. nov.** pl. CLXXI, fig. 722 Ambinanitelo; *A. l. ankitokensis* **var. nov.** pl. CLXXI, fig. 724; *A. besairiei* pl. CLXXI fig. 725; *A. gracilicostatus* pl. CLXXI, fig. 726; *A. orbiculatus* pl. CLXXII, fig. 727; Ampanihy sur Bevoay; *A. ambinanitelensis* pl. CLXXII fig. 728; Ambinanitelo; *A. davidi* pl. CLXXII fig. 729 Analavelona; *A. pinguis* pl. CLXXII, fig. 730, Ambilobe **spp. nov.** *A. proximus angusta* **var. nov.** pl. CLXXII, fig. 731 Antsalova; *A. mirandus* pl. CLXXII, fig. 732; Ampanihy sur Bevoay; *A. minusculus* pl. CLXXII figs. 733, 734; *A. elatus* pl. CLXXII fig. 735, Antsalova; *A. macer* pl. CLXXIII figs. 736, 737, Ambinanitelo; *A. ampasimbensis* pl. CLXXIII, figs. 738; Ampasimbe; *A. gracilis* pl. CLXXIII fig. 739 Antsalova; *A. venustus* pl. CLXXIII, fig. 740. Ampanihy sur Bevoay; *A. sarroti* pl. CLXXIII, fig. 741; Ambilobe **spp. nov.** Jurassic, Tithonic, Madagascar, **Collignon, M.**

Aulacosphinctoides antsalovensis pl. CXXXIII, fig. 500; *A. humilis* pl. CXXXIII, fig. 501; *A.* (?) *retrorous* pl. CXXXIII, fig. 502; Antsalova, Kimmeridgian; *A. heimi* pl. CL, fig. 604, Mandarana; **spp. nov.** *A. uhligi capillacea* **var. nov.** pl. CLI, fig. 608; *A. delepinei* pl. CLI, fig. 609, **sp. nov.**; *A. tibetanus percostata* **var. nov.** pl. CLII, fig. 610; *A. miloni* pl. CLII, fig. 611; *A. ambilobensis* pl. CLII, fig. 612; Antsalova, *A. gauthieri* pl. CLIII, fig. 615, Mandarana Tithonian **spp. nov.** Jurassic, Madagascar, **Collignon, M.**

Badenia **gen. nov.** p. 230 Perisphinctidae genotype *B. wegelei* nom. mut. (= *Perisphinctes acerrimus* Wegele non Siemiradzki) Jurassic Middle Jura, **Enay, R. (2).**

Beauvaisia **gen. nov.** p. 105 affinities with Oppelidae and Aulacostephanidae, genotype *B. andelotensis* **sp. nov.** p. 105, Jurassic, Andelot-en-Montagne (Jura), **Tintant, H. (2).**

Benueites spinosus Lower Turonian Cretaceous, internal structure, figs., **Reyment, R. A. (1).**

Beraketites **gen. nov.** [no family given]; *B. alloiteau* pl. LIX fig. 275; *B. lehmani* pl. LIX, figs. 276, 277; *B. dardennei* pl. LX, fig. 278; *B. planissimus* pl. LX, fig. 279; **spp. nov.** Andangovato (Argovian) [erroneously referred to *Orionoides* Spath; see erratum II before pl. CXXXIV]. Jurassic, Madagascar, **Collignon, M.**

Berriasella (*Protacanthodiscus*) *andraei variabilis* **var. nov.** pl. CLXV, figs. 666, 667; Ambinanitelo, Madagascar; Tithonic, Jurassic, **Collignon, M.**; *B. colombiana* **sp. nov.** p. 17, figs. 37, 38; Valanginian Cretaceous; Gachalá-Ubalá, Cundinamarca, S. America, **Haas, O.**

Binatisphinctes manamanensis pl. XXXV; fig. 187; *B. ankazoabensis* pl. XXXV; fig. 188; **spp. nov.** Ankazoabo; (Oxfordian); Jurassic, Madagascar, **Collignon, M.**

Blanfordiceras delgai **sp. nov.** pl. CLXVI, fig. 680; *B. d. multicostata* **var. nov.** pl. CLXVI, fig. 681; Ambinanitelo; *B. rotundidoma venusta* **var. nov.** pl. CLXVI fig. 685; Ampanihy sur Bevoay; *B. tenuicostatum* **sp. nov.** pl. CLXVII, fig. 686; Ampanihy sur Bevoay; Madagascar (Tithonian) Jurassic, **Collignon, M.**

Bonarellia rakotobei pl. XXVIII; figs. 124, 125; *B. ratoariveloi* pl. XXVIII fig. 126; (Callovian); Mont Ambohidroa **spp. nov.** *B. arambourgi* pl. XXXIII, fig. 154; *B. lehmani* pl. XXXIII, fig. 155; **spp. nov.** (Callovian) Manamana; Jurassic Madagascar, **Collignon, M.**

Bouleiceras (*Colcanapites*) *colcanapi* **sp. nov.** type; pl. I, fig. 7; Ratsy Ety; *B. rebillyi* **sp. nov.** pl. II, fig. 11; *B. rochi* **sp. nov.** pl. III, fig. 22; Lias (Toarcian) Madagascar **Collignon, M.**

Brightia noizeti **sp. nov.** pl. XXXIV, fig. 168; Ankirihitra; (Oxfordian); Jurassic, Madagascar, **Collignon, M.**

Buchiceras bilobatum mode of life and ecology deduced from epizoans, **Sellacher, A.**

Callizoniceras (*Wollemanniceras*) *alaskanum* p. 101, pl. 12, figs. 11–16; *C.* (*W.*) *fohlinense* p. 101, pl. 12, figs. 1–10; **spp. nov.** Chitina Valley Alaska, Albian Cretaceous, **Imlay, R. W. (1).**

Campylites secula malakialinensis **var. nov.** pl. XXVIII, fig. 119; (Callovian); Malakialina; *C. letullieri* **sp. nov.** pl. XXXIII, figs. 156, 157; (Callovian) Manamana *C. delmontanus ambongoensis* **var. nov.** pl. XXXIV, fig. 166; Ankirihitra; (Oxfordian); Jurassic Madagascar, **Collignon, M.**

Cardioceras mountjoyi **sp. nov.** p. 22, pl. 3, figs. 1a, b, 2a, b, 3a, b; pl. 4, figs. 1a, b; *C. m. robusta* **var. nov.** p. 23, pl. 4, figs. 2a, b; Rocky River, Miette area Alberta, Jurassic, **Frebold in Freebold, Mountjoy & Reed.**

Cheloniceras compared with *Colombiceras*, **Mikhailova, I. A.**

Cleoniceras ? dilleri **sp. nov.** p. 157, pl. 29, figs. 5, 13, 14; early to middle Albian, Cretaceous, Oregon, **Jones, D. L. (2)**; *C. overbecki* **sp. nov.** p. 108, pl. 19, figs. 36–39; Chitina Valley, Alaska, Albian Cretaceous, **Imlay, R. W. (1).**

Clydoniceras madagascariense **sp. nov.** pl. IX, fig. 44; (Bathonian) Jurassic; Andranomantsy, Madagascar, **Collignon, M.**

Coeloceras vedeli **sp. nov.** p. 109, pl. 5, f. 7, 7a. St. Ambroix, Gard, France. Upper Lias, **Brun, P. de.**

Coeloderoceras bispinatum densicostatum **var. nov.** p. 35, Lias Langeneckgrat Prealps, **Donovan, D. T.**

Colombiceras ontogenesis and systematic status and comparison with *Cheloniceras*, **Mikhailova, I. A.**

Corongoceras loctonense fortior **var. nov.** pl. CLXVII, fig. 687; Ambilobe; *C. rebillyi* pl. CLXVII, fig. 689 Analavelona *C. irregulare* pl. CLXVII, fig. 690; Saonje; *C. nicklesi* pl. CLXVIII, fig. 691; Ambohibe; *C. nodosum*, pl. CLXVIII, fig. 692; Sikily; *C. inflatiforme* pl. CLXVIII, figs. 693, 694, 695; Ambinanitelo; *C. mazenoti* pl. CLXVIII fig. 696; Ambohibe; *C. diversecostatum* pl. CLXVIII, fig. 697; Saonje; *C. paucicostatum* pl. CLXVIII, fig. 698; Sikily; *C. elegans* pl. CLXVIII, fig. 699; Ampanihy sur Bevoay; *C. aurouzei* pl. CLXVIII, figs. 700; Sikily; *C. iabohazense* pl. CLXVIII, fig. 701; Malakialina; *C. lamellosum* pl. CLXVIII, fig. 702; Ampanihy sur Bevoay; *C. fibulatum* pl. CLXIX figs. 703, 704; Saonje; *C. bifurcatum* pl. CLXIX, fig. 706; Malakialina; **spp. nov.** Madagascar (Tithonian) Jurassic, **Collignon, M.**

Cotteswoldia costulata sourensis **var. nov.** p. 382, pl. 1, figs. 1, 1a, 2; Jurassic, Tage, Portugal, **Perrot, C.**

Craspedites (*Subcraspedites*) *kaschpuricus* Lower Neocomian, Cretaceous; internal structure, figs., **Reyment, R. A. (1).**

Crussoliceras **gen. nov.** p. 230 Perisphinctidae genotype *Ammonites crusoliensis* (Font.) Dumort. & Font. Jurassic, Middle Jura, **Enay, R. (2).**

Dactylioceras tenuicostatum zone from the Toarcien (Lias) of Germany, **Hoffmann & Martin.**

Delecticeras anjohense **sp. nov.** pl. IX; figs. 48, 48a; Mont Anjoho, Madagascar (Bathonian) Jurassic; **Collignon, M.**

Deshayesites spp. from Höllviken boreholes, S. Sweden; Aptian, **Reyment, R. A. (2).**

Desmoceratidae relative size of species, lists of dimensions, **Obata, I. (1).**

Dhosaites barbieri **sp. nov.** pl. LV, fig. 268; Andangovato; *D. miaryensis* **sp. nov.** pl. LXXXV, figs. 342, 343; Ankazoabo (Argovian) Jurassic, Madagascar, **Collignon, M.**

Diadochoceras caucasicum Luppov (**sp. nov.**) p. 284, pl. 47, fig. 9; Cretaceous, genus see p. 104, **Luppov & Drushchitz [in Orlov].**

Dichotomoceras cliqueti **sp. nov.** pl. LXIV, fig. 286; *D. rabenjanaharyi* **sp. nov.** pl. LXIV, fig. 288; Bedoa; *D. umilicatum* pl. LXV; *D. quadratum* pl. LXVI, fig. 293; *D. sparsicostatum* pl. LXVI, fig. 224; **spp. nov.** Bedoa (Argovian) Madagascar Jurassic, **Collignon, M.**

Dichotomosphinctes wartae bedoensis **var. nov.** pl. LXI, fig. 281; Bedoa; *D.* (*Otosphinctes*) *rota fasciculata* **var. nov.** pl. LXII, fig. 282; Andangovato *D. martini* **sp. nov.** pl. LXIII, fig. 283; Bedoa; *D. decaryi* **sp. nov.** pl. LXVIII, fig. 297; Andangovato (Argovian) ; *D. germaini* **sp. nov.** pl. XCI, fig. 360, Maroroka (Rauracian); *D. sikilyensis* **sp. nov.** pl. C, fig. 381; Sikily (Kimmeridgian); *D.* (*Otosphinctes*) *rota constricta* **var. nov.** pl. LXVIII, fig. 298; Andangovato (Argovian) [see erratum II]; Madagascar, **Collignon, M.**

Discoceras (*Hardmanoceras* ?) *chrysanthimum* p. 404, pl. 26, figs. 1a–b; *D.* (*H.* ?) *laeviventrum* p. 405, pl. 26, figs. 2a–b; **spp. nov.** Ordovician, Pulau, Langkawi Islands, Malaya, **Kobayashi, T. (3).**

Discosphinctes mosensis **sp. nov.** p. 624, fig. 6 ; Jurassic (upper Oxfordian), Lamorville, France, **Maubeuge, P. L.**; *D. tintanti* **sp. nov.** pl. LXXVI, fig. 316; Andangovato (Argovian); *D. ardesicus rigida* **var. nov.** pl. XCIX, fig. 378; Antsalova; *D. choffati* **sp. nov.** pl. C, fig. 379; Sikily; *D. ardesicus constricta* **var. nov.** pl. CXV, fig. 441; Antsalova; *D. secretanae* **sp. nov.** pl. CXV; fig. 442; Ampanihy sur Bevoay (Kimmeridgian), Madagascar, **Collignon, M.**

Divisosphinctes besairiei **sp. nov.** pl. LXXXVIII, fig. 350; Antrobika (Argovian); Jurassic, Madagascar, **Collignon, M.**

Dorsoplanites (?) *antsalovensis* **sp. nov.** pl. CXXVII; fig. 478; Antsalova (Kimmeridgian), Jurassic, Madagascar, **Collignon, M.**

Eogunnarites matsumotoi **sp. nov.** p. 855, pl. 104, figs. 1, 2, 3; Cottonwood Creek, Bald Hills formation, Cretaceous, California, **Murphy & Rodda.**

Epideroceras grande p. 38, pl. 3, figs. 1a, b; text-fig. 7; *E. hugi* p. 39 pl. 4 f.1a, b, text-f. 8; **spp. nov.** Lias, Langeneckgrat Prealps, **Donovan, D. T.**

Epimayaites falcoides perdensicostata **var. nov.** pl. XLIX, fig. 246; Ambatomanandry; *E. axonoides rigida* **var. nov.** pl. LIII, fig. 262; Andangovato; *E. moreti* **sp. nov.** pl. LV, fig. 265; Andangovato, *E. sublautus* **sp. nov.** pl. LV, fig. 267, Andangovato; *E. pruvosti* pl. LXXXII, fig. 326; *E. sornayi* pl. LXXXII, fig. 327; **spp. nov.** Ankazoabo; *E. s. densestriata* **var. nov.** pl. LXXXIII, fig. 330; Ankazoabo (Argovian) Jurassic, Madagascar, **Collignon, M.**

Euaspidoceras mahabense **sp. nov.** pl. XXXVII, fig. 199; Andapanaomby; *E. vendegiesi* **sp. nov.** pl. XLIV, fig. 222; Signal Mandapanja; *E. babeaui madagascariensis* **var. nov.** pl. XLV, fig. 223; Ankazoabo; *E. falloti* **sp. nov.** pl. XLVI, fig. 224; Besalampy (Oxfordian); *E. perarmatum beraketensis* **var. nov.** pl. LXXIX, fig. 322; Andangovato (Argovian) Jurassic, Madagascar, **Collignon, M.**

Extranodites erardae **sp. nov.** pl. XLIV, fig. 221; Andona (Oxfordian) Jurassic, Madagascar, **Collignon, M.**

Favrella colombiana **sp. nov.** p. 29; figs., 69–74, 76–79; Lower Hauterivian, Cretaceous, Rio Fonce, Santander, S. America, **Hass, O.**

Freboldiceras imlayi **sp. nov.** p. 21, pl. 1, figs. 6–12, Albian, Lower Cretaceous, Hume River, North West Territories, Canada, **Warren & Stelck.**

Garnierisphinctes **gen. nov.** p. 230 Perisphinctidae genotype *Ammonites garnieri* (Font.) Dumort. & Font. Jurassic Middle Jura, **Enay, R. (2).**

Glebosoceras glebosum, Lower Turonian Cretaceous, internal structure, figs., **Reyment, R. A. (1).**

Glochiceras umbilicocrenatum pl. CXLIII, fig. 543; *G. venustum* pl. CXLIII, fig. 546; Mandarana; **spp. nov.** Madagascar (Tithonian) Jurassic, **Collignon, M.**

Gombeoceras gongilense Lower Turonian Cretaceous, internal structure, figs., **Reyment, R. A. (1).**

Gracilisphinctes arkelli **sp. nov.** type pl. VI, figs. 31–31a, 32, 33; *G. lemoinei* pl. VII, fig. 35; *G. andranomantsyensis* pl. VII, figs. 36, 36a; **spp. nov.** Andranomantsy, Madagascar (Bathonian) Jurassic, **Collignon, M.**

Granulochetoceras **subgen. nov.** p. 423, of *Ochetoceras* q.v., Jurassic, Germany, **Geyer, O. F.**

Graysonites Cretaceous, Kyushu, **Matsumoto, T. (2).**

Gregoryceras rogeri **sp. nov.** pl. LXXXIV, fig. 334; Ankazoabo (Argovian) Jurassic, Madagascar, **Collignon, M.**

Grossouvreia delbosi **sp. nov.** pl. XXII; fig. 92; Besavoa, Madagascar (Callovian) Jurassic; *G. debelmaei* **sp. nov.** pl. LXXXIV fig. 337; Ankazoabo (Argovian) Jurassic, Madagascar, **Collignon, M.**

Hannaites truncatus **sp. nov.** p. 218, pl. 41, figs. 1, 3, 4; Hauterivian Cretaceous; Pacific Coast States, Oregon, **Imlay, R. W. (2).**

Harpoceras radians, Toarcian Jurassic, internal structure, figs., **Reyment, R. A. (1).**

Hemiparinodiceras **subgen. nov.** p. 143 of *Liparoceras* subgenotype *L.* (*H.*) *urkuticum* **sp. nov.** p. 143, pl. 1; text–figs. 1, 2; Urkut, Csárda Hill, Bakony Mts., Transdanubia Hungary, Lias, **Géczy, B. (2).**

Hemisimoceras rati **sp. nov.** pl. CLXI, fig. 640; Antsalova; Madagascar (Tithonic) Jurassic, **Collignon, M.**

Hengestites **gen. nov.** p. 201 of Placenticeratidae; type *H. applanatus* **sp. nov.** p. 203, pl. 29, figs. 1–4; text–figs. 1a–c, 2a–b; Upper Gault, S. E. England, **Casey, R. (3).**

Hertleinites pecki **sp. nov.** p. 208, pl. 35, figs. 1, 3–5; pl. 43, figs. 1–3; Hauterivian Cretaceous, Pacific, Coast States, California, **Imlay, R. W. (2).**

Hildoceras bifrons, Lower Toarcian, Jurassic, internal structure figs., **Reyment, R. A. (1).**

Hildoglochiceras kobelli madagascariensis **var. nov.** pl. CXLIII, figs. 551, 552, 553, 554; Mandarana; *H. latistrigatum angusta* **var. nov.** pl. CXLIV fig. 557; Ampanihy sur Bevoay; *H. colei fortior* **var. nov.** pl. CXLIV, fig. 562; Mandarana; *H. parceumbilicatum* pl. CXLIV, fig. 563; Mandarana; *H. melvillei* pl. CXLV, fig. 565; Reamilitzy; *H. ziegleri* pl. CXLV, fig. 566; Ampanihy sur Bevoay; *H. nudum* pl. CXLV, fig. 567; Mandarana; *H. tenuicostulatum* pl. CXLV, fig. 568-569; Maizimazava; **spp. nov.** Madagascar (Tithonian) Jurassic, **Collignon, M.**

Himalayites seideli ampanihyensis **var. nov.** pl. CLXXIII; fig. 743; Ampanihy sur Bevoay; *H. egregius sikilyensis* **var. nov.** pl. CLXXIV fig. 745; Analavelona; *H. hirtzi* pl. CLXXIV, fig. 746; Ambohibe; *H. spinosissimus* pl. CLXXIV, fig. 747; Saonje; *H. inflatus* pl. CLXXIV, fig. 750; Ambilobe; *H. milloti* pl. CLXXV, fig. 751; Analavelona; *H. faucium* pl. CLXXV, fig. 753; Sikily; **spp. nov.** (Tithonic) Jurassic, Madagascar, **Collignon, M.**

Hollisites dichotomus p. 212, pl. 38, figs. 6, 7; *H. inflatus* p. 212, pl. 37, figs. 1, 3, 4, 6; **spp. nov.** Hauterivian Cretaceous; Pacific Coast States, Oregon and California, **Imlay, R. W. (2).**

Hoplitoides gibbosulus Lower Turonian Cretaceous, internal structure figs., **Reyment, R. A. (1).**

Hubertoceras ranaivoi **sp. nov.** pl. XXIX, fig. 129; (Callovian); Malakialina; Jurassic Madagascar, **Collignon, M.**

Hybonoticeras breistrofferi **sp. nov.** pl. CXXXII, figs. 497, 498, Belambo, Kimmeridgian; *H. mundulum tuberosa* **var. nov.** pl. CLXI, fig. 642; *H. dubourdieui* pl. CLXI, figs. 643, 644, *H. laevigatum* pl. CLXI, fig. 645; **spp. nov.** Mandarana, Madagascar; Tithonian Jurassic, **Collignon, M.**

Idiocycloceras rebillyi **sp. nov.** pl. XXI; fig. 86; (Callovian) Jurassic; Tsaramandroso, Madagascar, **Collignon, M.**

Idoceras **n.sp. aff.** *farquharsoni* p. 154, pl. 7, figs. 5a, b; S. of Diredaua; *I.* **n.sp. aff.** *figueroae* p. 155, pl. 6, fig. 6; pl. 7, figs. 1a, b; East of Diredaua; E. Africa, Jurassic, **Venzo, S. (1).**

Indosphinctes brenoni pl. XXIII; fig. 94; *I. besavoensis* pl. XXIV; fig. 95; **spp. nov.** Besavoa, Madagascar; (Callovian) Jurassic, **Collignon, M.**

Jeannetia hourcqi **gen. et. sp. nov.** pl. XIII, f. 69, [fasc. 1, 1958]. (Callovian) Jurassic; Antsihareza, Madagascar.—See *Jeanneticeras & Jeannetites*—**Collignon, M.**

Jeanneticeras **nom. nov.** pro *Jeannetia* Collignon 1958 (preocc.). Errata I before pl. XXXIV, [fasc. 3, 1959]—See *Jeannetites*—**Collignon, M.**

Jeannetites **nom. nov.** pro *Jeannetia* Collignon 1958 and *Jeanneticeras* Collignon 1959 (preocc.) q.v.; Errata II before pl. CXXXIV, [fasc. 6 1960]. **Collignon, M.**

Kamptokephalites amboromihantensis **sp. nov.** pl. XIX, fig. 82; (Callovian) Jurassic; Amboromihanto, Madagascar, **Collignon, M.**

Katroliceras pottingeri analavelonensis **var. nov.** pl. CXXI, fig. 457; Belambo; *K. belamboense* pl. CXXIII fig. 462; pl. CXXIV 463, 467; *K. matsumotoi* pl. CXXV, fig. 468; *K. corroyi* pl. CXXV, fig. 470; Belambo; **spp. nov.** (Kimmeridgian) Jurassic, Madagascar, **Collignon, M.** *K.* **n.sp. aff.** *pottingeri* p. 149, pl. 6, figs. 7a, b; Diredaua, Harar, East Africa, Jurassic, **Venzo, S. (1).**

Kennicottia rugosa **sp. nov.** p. 103, pl. 15, figs. 7–13; Chitina Valley, Alaska, Albian Cretaceous, **Imlay, R. W. (1).**

Kheraites giraudi **sp. nov.** pl. XXVIII, fig. 118; (Callovian); Ambatomasina; Jurassic, Madagascar, **Collignon, M.**

Kinkeliniceras cattalai **sp. nov.** pl. XXIX, fig. 136; (Callovian), Ankoba; Jurassic, Madagascar, **Collignon, M.**

Kossmatia viterboensis **sp. nov.** p. 6; figs. 10, 11; Berriasian, Cretaceous, Santa Rosa de Viterbo, Boyacá, S. America, **Haas, O.**

Kranaosphinctes subbullingdonensis pl. LXV fig. 289; Bedoa; *K.* (*Pachyplanulites*) *behieri* pl. LXIX fig. 300; Andangovato; *K.* (*P.*) *roedereri* pl. LXXII fig. 307; *K.* (*P.*) *poissoni* pl. LXXIII, fig. 308; K. (*P.*) *randrianarivonyi* pl. LXXIV, fig. 309; *K.* (*P.*) *praecvolutus* pl. LXXV, fig. 313; Andangovato Argovian; *K.* (*P.*) *rabei* pl. XC. figs. 356, 357, Maroroka, Rauracian; *K.* (*P.*) *mahabobokensis* pl. XCII, fig. 361; pl. XCIII, figs. 361a, b; Mahaboboka, **spp. nov.** Jurassic, Madagascar, **Collignon, M.**

Larcheria **gen. nov.** p. 123, affinities with *Discosphinctes* genotype *L. larcheri* **sp. nov.** p. 126, pl. 1, fig. 4; Fontaines-les-Dijon (Côte-d'Or) *L. latumbilicata* **sp. nov.** p. 131, pl. 2, fig. 2; Plombières (Côte-d'Or), *L. gignyensis* **sp. nov.** p. 139, pl. 1, figs. 5a, b; Gigny (Yonne) Jurassic, France, **Tintant, H. (1).**

Leioceras goetzendorfense, *L.* **aff.** *costosum*, *L.* cf. *bifidatum*, *L.* cf. *thompsoni*, *L.* cf. *helveticum*, *L.* cf. *uncum* *L.* **aff.** *gracile*, revision from the Dogger, **Zeiss, A. (1).**

Lemuroceras talkeetnanum **sp. nov.** p. 109, pl. 18, figs. 34–41; Talkeetna Mountains, Alaska, Albian Cretaceous, **Imlay, R. W. (1).**

Liosphinctes linki sakondryensis **var. nov.** pl. LXX, fig. 305; Andangovato; (Argovian) Jurassic, Madagascar, **Collignon, M.**

Liparoceras (*Hemiparinodiceras*) *urkuticum* **subgen. et sp. nov.** p. 143, q.v., **Géczy, B. (2).**

Lithacoceras **n. sp. aff.** *roubyanum* p. 126, pl. 2, figs. 6a, b; Gocti, Changamwe Province, *L. spathi* **nom. nov.** p. 127 pro *L.* **aff.** *unicomptum* Spath 1930 Diredaua, Monte Condudo and Malcà Balcad Gebiss, E. Africa, Jurassic, **Venzo, S. (1);** *L. torquatiforme umbilicata* **var.**

nov. pl. XC, fig. 358; *L. mombassanum antrobikensis* **var. nov.** pl XC, fig. 359; Antrobika, Rauracian; *L. soucadeauxi* **sp. nov.** pl. CIII, fig. 387; Sikily; *L. sigali* **sp. nov.** pl. CVI, fig. 390; Sikily; (Kimmeridgian) Jurassic, Madagascar, **Collignon, M.**

Ludwigia aff. *tolutaria*, *L.* cf. *intralaevis*, and *L.* cf. *glevensis* revision from the Dogger, **Zeiss, A. (1).**

Lunuloceras orientale ankazoabensis **var. nov.** pl. XXXII, fig. 145; (Callovian); Manamana; Madagascar, Jurassic, **Collignon, M.**

Lyelliceras **sp. nov.?** p. 156, pl. 29, figs. 11, 15, 16; Early to middle Albian, Cretaceous, Oregon, **Jones, D. L. (2).**

Lytohoplites hourcqi bevoayensis **var. nov.** pl. CLXV, figs. 672, 673; Ambohimaranitra; *L. besairiei* **sp. nov.** pl. CLXV, figs. 674, 675; Malakialina; *L. b. saonjensis* **var. nov.** pl. CLXV, fig. 676; Saonje; *L. b. ambilobensis* **var. nov.** pl. CLXV, fig. 677; Ambilobe; *L. transitorius* **sp. nov.** pl. CLXV, fig. 678; Ampanihy sur Bevoay; Madagascar (Tithonian,) Jurassic, **Collignon, M.**

Mammites mutabilis, Lower Turonian Cretaceous, internal structure figs., **Reyment, R. A. (1).**

Mantelliceras mantelli and *M. martimpreyi* zones of the British Lower Cenomanian (Cretaceous), **Casey, R. (4).**

Mayaites grepini pl. XXXVIII; fig. 201; Besalampy; *M. dolium* pl. XXXIX, fig. 203; Ankazoabo; **spp. nov.** (Oxfordian); *M. piveteaui* pl. LII, fig. 259; Bedoa; *M. hirtzi* pl. LII, fig. 260; Bedoa; **spp. nov.** (Argovian) Jurassic, Madagascar, **Collignon, M.**

Metoicoceras alaiense Luppov **(sp. n.)** p. 306, pl. 58, fig. 2; Cretaceous, genus see p. 120. **Luppov & Drushchitz [in Orlov].**

Micromphalites saint-oursi pl. IX; fig. 45; Andranomantsy; *M. golenkoi* pl. IX; fig. 46; Soaravikely; *M. hourcoi* pl. IX; fig. 47; Mahabo-Namoroka; **spp. nov.** (Bathonian) Jurassic, Madagascar, **Collignon, M.**

Moffitites crassus **sp. nov.** p. 102, pl. 14, figs. 3–7; Chitina Valley Alaska; Albian, Cretaceous, **Imlay, R. W. (1).**

Neocraspedites giganteus **sp. nov.** p. 204, pl. 32, figs. 1–6; Valanginian Cretaceous, Pacific Coast States, California, **Imlay, R. W. (2).** —

Neogastroplites haasi **sp. nov.** p. 58; pl. 13, figs. 19–21; text–fig. 11–13; Montana, Wyoming; *N. muelleri* **sp. nov.** p. 81, pl. 30. figs 10–12; pl. 40, fig. 7, pl. 42, figs. 11–12; text–figs. 18–22; Montana; *N. maclearni* **sp. nov.** p. 111; pl. 57, figs. 13–15; text–figs. 27–29; Montana; Wyoming; Mowry Shale Cretaceous; **Reeside & Cobban.**

Neolobitinae Luppov **subfam. nov.** p. 127, of Engonoceratidae for *Neolobites* Fischer 1822, Cenomanian, **Luppov, & Drushchitz [in Orlov].**

Obtusicostites ankoboensis **sp. nov.** pl. XXIX, fig. 132; (Callovian), Ankoba; *O. retrorsicostatus* **sp. nov.** pl. XXXIV, fig. 171; (Oxfordian), Ankirihitra; Jurassic, Madagascar, **Collignon, M.**

Oecoptychiidae **fam. nov.** Arkell, p. L296, of Stephanocerataceae for *Oecoptychius* and *Protophites*, Jurassic, **Arkell, Kummel & Wright [in Moore].**

Olcostephanus delicatecostatus **sp. nov.** p. 9; figs. 12–14; U. Valanginian, Cretaceous, Cáqueza, Cundinamarca, S. America, **Haas, O.**; *O. pecki* p. 202, pl. 29, figs. 1–5, 7–9; pl. 30, pl. 31, fig. 7; *O. popenoei* p. 203, pl. 31, figs. 1–3; **spp. nov.** Valanginian and Hauterivian, Cretaceous Pacific Coast States, Oregon, **Imlay, R. W. (2).**

Oosterella columbiana **sp. nov.** p. 45; figs. 107, 108; Lower Hauterivian, Cretaceous, Cáqueza, Cundinamarca, S. America, **Haas, O.**

Orbignyceras hirtzi **sp. nov.** pl. XXXIII, fig. 161; (Callovian), Manamana; Madagascar, Jurassic, **Collignon, M.**

Orthaspidoceras nodosocostatum **sp. nov.** pl. CXXX, figs. 488, 489; Ampanihy sur Bevoay; (Kimmeridgian) Jurassic, Madagascar, **Collignon, M.**

Orthosphinctes (= *Biplices*) *beraketensis* **sp. nov.** pl. LXXVII, fig. 320; Andangovato; (Argovian); *O. ciryi* **sp. nov.** pl. CII, fig. 385, Sikily; (Kimmeridgian) Jurassic, Madagascar, **Collignon, M.**

Oxycerites aspidoides umbilicata **var. nov.** pl. X; figs. 49, 49a; *O. rodoensis* pl. X; fig. 50; *O. besairiei* pl. X, figs. 51, 51a; **spp. nov.** Andranomantsy, Madagascar (Bathonian) Jurassic, **Collignon, M.**

Pachyplanulites **n. sp.** aff. *subevolutus* (Waagen) p. 115, pl. 1, figs. 1, 2a–d; pl. 13, fig. 4; Diredaua, E. Africa, Jurassic, **Venzo, S. (1).**

Pachysphinctes hirtzi **sp. nov.** pl. CIV, fig. 388; Belambo; *P. marellei* pl. CXVII, fig. 444; *P. trichordis* pl. CXVII, fig. 445; **spp. nov.** Ambohimaranitra; (Kimmeridgian) Madagascar, **Collignon, M.**

Pachyvascoceras proprium proprium and *P. costatum* Lower Turonian Cretaceous, internal structure figs. **Reyment, R. A. (1).**

Paraglochiceras **gen. nov.** no family given, type **sp.** *P. lauteli* **sp. nov.** pl. CXV, fig. 438; Ampanihy sur Bevoay; (Kimmeridgian) *P. biroi* pl. CXLV, fig. 570, Mandarana, fig. 571, Ampanihy sur Bevoay; *P.* (*Neoglochiceras*) *tuberosum* pl. CXLV, fig. 572; Mandarana; *P. ampanihyense* pl. CXLVI, figs. 573, 574; *P. semitectum* pl. CXLVI, fig. 575; Ampanihy sur Bevoay; *P. hirtzi* pl. CXLVI, fig. 576; *P. giraudoni* pl. CXLVI, fig. 577; Reamilitzy and Mandarana; **spp. nov.** Madagascar (Tithonian), Jurassic, **Collignon, M.**

Parapuzosia (*Austiniceras*) *sealei* **sp. nov.** p. 235, pl. 34, figs. 1–3; text–figs. 1, 2; Upper Turonian (Cretaceous) Dallas County, Texas, **Clark, D. L.**

Parasilesites irregularis **sp. nov.** p. 107, pl. 18; figs. 9–17; Chitina Valley, Alaska, Albian Cretaceous, **Imlay, R. W. (1).**

Paraspidoceras magdalenae **sp. nov.** pl. XCV, fig. 364; Antrobika; (Rauracian); Jurassic Madagascar, **Collignon, M.**

Paravascoceras costatum multicostatum **subsp. nov.** p. 60, pl. 13, fig. 3; pl. 14, figs. 1, 2; Pindiga, N. E. Nigeria; Salmurian Cretaceous, **Barber, W.**

Parawedekindia arduennensis ankilizatensis **var. nov.** pl. XLVIII; fig. 234, 235; *P. trifurcata* **sp. nov.** pl. XLVIII; fig. 237; Ambatomanandry Madagascar, Jurassic (Argovian) **Collignon, M.**

Patagoniceras **gen. nov.** p. 249 of Neocomitinae, *P. steinmanni perinconstans* **subsp. nov.** p. 250, text–figs. 1; 2; Coyhaique Patagonia, Hauterivian Cretaceous, **Wetzel, W.**

Phanerostephanus besairiei pl. CLIX, figs. 632, 633; *P. antsalovensis* pl. CLIX, fig. 634; **spp. nov.** Antsalova; Madagascar (Tithonian) Jurassic, **Collignon, M.**

Phlyctieeras pustulatum madagascariensis **var. nov.** pl. XXVIII, figs. 113, 114; (Callovian); Saonje; Jurassic Madagascar, **Collignon. M.**

Physodoceras sub-dogouense **sp. nov.** p. 169, pl. 8, figs. 3a, b, 5; pl. 9, figs. 1a, b; pl. 10, fig. 2; Monte Condudo, Gobà, E. Africa, Jurassic, **Venzo, S. (1).**

Placenticeras meeki, Kipp Sandstone Bearpaw shale, Lethbridge area, Alberta, **Link & Childerhose;** *P.* cf. *whitfieldi* Hyatt, bitten by a mososaur, Cretaceous, Scenic, South Dakota, **Kauffman & Kesling.**

Platysphinctes **gen. nov.** p. 112 of Perisphinctinae genotype *Platysphinctes perplanatus* **sp. nov.** p. 115, pl. 1, fig. 7; Talant (Côte-d'Or), Fontaine-lès-Dijon (Côte-d'Or) and Gigny (Yonne); *P. talantiensis* **sp. nov.** p. 119, pl. 1, fig. 2; Talant (Cote-d'Or) Jurassic France, **Tintant, H. (1).**

Plesiovascoceras aff. *stantoni* Rees, Turonian, Blanc-Nez N. France, **Destombes & Sornay.**

Pleurocephalites costumbilicatus andranomantsyensis **var. nov.** pl. XIX, fig. 81; (Callovian) Jurassic, Andranomantsy, Madagascar, **Collignon, M.**

Polyptychites pumilio **sp. nov.** p. 494 pl 26, figs. 1–8; pl. 27, figs. 1–13; pl. 28, fig. 3; Bückeburg, Cretaceous, **Vogel, K-P. (1).**

Praeidoceras **subgen. nov.** of *Idoceras; I.* (*P.*) *madagascariense* **sp. nov.** pl. LXIII, fig. 285; Bedoa; (Argovian) Jurassic Madagascar, **Collignon, M.**

Praenegreliceras **subgen. nov.** of *Spiticeras* q.v. Tithonian, Madagascar, **Collignon, M.**

Prograyiceras grayi beraketensis **var. nov.** pl. LVIII, fig. 273, Andangovato; *P. furoni* **sp. nov.** pl. LXIX, fig. 299, Andangovato; *P. bassei elegans* **var. nov.** pl. LXXXII, fig. 329, Ankazoabo; *P. crassum* **sp. nov.** pl. LXXXIV, fig. 335; Ankazoabo, Argovian, Jurassic, Madagascar, **Collignon, M.**

Proniceras jacobiforme **sp. nov.** pl. CLXII, fig. 649; *P. toucasi recta* **var. nov.** pl. CLXII, fig. 650, Ampanihy sur Bevoay; *P. madagascariense* pl. CLXII figs. 651, 652, Ambinanitelo; *P. mazenoti* pl. CLXII fig. 653; Saonje; *P. subsimplex* pl. CLXII fig. 654; Malakialina; **spp. nov.,** *P. subpronum saonjensis* **var. nov.** pl. CLXIII, fig. 656; *P. crassum* **sp. nov.** pl. CLXIII, fig. 657; Saonje; Madagascar (Tithonian) Jurassic, **Collignon, M.**

Prososphinctes hirtzi **sp. nov.** pl. LXVI, fig. 292; Bedoa; *P. sagitta sagittiformis* **var. nov.** pl. LXXVII, fig. 319; Andangovato; (Argovian), Jurassic Madagascar, **Collignon, M.**

Protogrammoceras thevenini **sp. nov.** pl. III, fig. 18; Region de Bemonto; Lias (Toarcian) Madagascar, **Collignon, M.**

Pseudaspidoceras paganum Lower Turonian Cretaceous, nternal structure, figs., **Reyment, R. A. (1).**

Pseudinvoluticeras mozambicum **sp. nov.** pl. CLIX, fig. 631; Analavelona; Madagascar (Tithonian) Jurassic, **Collignon, M.**

Pseudoclydoniceras **gen. nov.** of Clydoniceratidae *P. besairiei* **sp. nov.** pl. XXV, fig. 102; (Callovian), Jurassic, Madagascar, **Collignon, M.**

Pseudolioceras chavignyense **sp. nov.** p. 621, figs. 1–5; Jurassic, Mine d' Audun le Tiche, Moselle France, **Maubeuge, P. L.**

Pseudoosterella ubalaensis **sp. nov.** p. 48; figs. 109–119, 121, 122; Lower Valanginian, Cretaceous, Ubalá, Cundinamarca, S. America, **Haas, O.**

Pseudotissotia (*Wrightoceras*) *wallsi* and *P.* (*Bauchioceras*) *nigeriensis*, Lower Turonian Cretaceous, internal structure figs., **Reyment, R. A. (1).**

Pseudowaagenia freneixae **sp. nov.** pl. CX, fig. 406; Sikily; (Kimmeridgian) [see erratum II]; *P. haynaldi tuberculata* **var. nov.** pl. CXXX fig. 487; Sikily (Kimmeridgian); [see erratum II]; Jurassic, Madagascar, **Collignon, M.**

Psiloceras suberugatum p. 57, pl. 4, f. 1, 2; *P. viligensis* p. 58, pl. 4, f. 3; **spp. nov.** Viligi river, northern shore of Okhotsk sea, north east U.S.S.R. Early Hettangian, Jurassic, **Polubotko & Chudoley.**

Putealiceras intermedium irregularis **var. nov.** pl. XXXIII, fig. 159; (Callovian), Malakialina; Jurassic Madagascar, **Collignon, M.**

Puzosia alaskana **sp. nov.** p. 104, pl. 16, figs. 1–13; Chitina Valley Alaska, Albian Cretaceous, **Imlay, R. W. (1);** *P. mayoriana* pl. 5, figs. 1–3; pl. 6, fig. 1, from the Cretaceous of Veliki Krivelj, Yugoslavia, **Antonijevic, I.;** *P. puma* p. 849, pl. 104, fig. 5, 6; Coyote Creek; *P. sullivanae* p. 850, pl. 105, figs. 4, 5; **spp. nov.** Cretaceous Bald Hills formation, California, **Murphy & Rodda.**

Reineckeia de la rochei **sp. nov.** pl. XXVIII, fig. 121; (Callovian); Jurassic Malakialina; Madagascar, **Collignon, M.**

Rochites **gen. nov.** Strebilitidae *R. rochi* **sp. nov.** pl. CXLVII figs. 589; 590; Mandarana, Madagascar (Tithonic) Jurassic, **Collignon, M.**

Romaniceras Spath 1923, age in the Cretaceous of S India, **Sarkar, S. S. (2).**

Sarasinella densicostata **sp. nov.** p. 219, pl. 42, fig. 25; Valanginian Cretaceous; Pacific Coast States Oregon, **Imlay, R. W. (2);** *S. hondana* **sp. nov.** p. 32; figs. 75, 81, 83, 85–87, 89–91, 95; Upper Berriasian, Cretaceous Quebrada Honda, Boyacá, S. America, **Haas, O.**

Schwandorfia boulangeri **sp. nov.** pl. XI; figs. 58, 58a; Andranomantsy, Madagascar, (Bathonian) Jurassic, **Collignon, M.**

Sivajiceras besairiei **sp. nov.** pl. XX; figs. 84, 84a; (Callovian) Jurassic; Andranomantsy, Madagascar, **Collignon, M.**

Speetoniceras agnessense **sp. nov.** p. 213, pl. 42, figs. 6, 9, 10, 15, 17; Hauterivian Cretaceous, Pacific Coast States, Oregon, **Imlay, R. W. (2);** *S. versicolor* Lower Neocomian, Cretaceous; internal structure figs., **Reyment, R. A. (1).**

Spiticeras celsum baraensis **var. nov.** pl. CLXIII, fig. 659; *S. hirtzi* pl. CLXIII, fig. 660; Ampanihy sur Bevoay; *S.* (*Kilianiceras*) *jacobi* pl. CLXIV, fig. 662; **spp. nov.** *S.* (*Praenegreliceras* **subgen. nov.**) *hourcqi* **sp. nov.** pl. CLXIV, fig. 663; *S.* (*P.*) *barrabei* **sp. nov.** pl. CLXIV, fig. 664; Antsalova, Madagascar; Jurassic (Tithonian), **Collignon, M.**

Spitidiscus oregonensis **sp. nov.** p. 221, pl. 31, figs. 4–6, 8, 9; Hauterivian, Cretaceous, Pacific Coast States, Oregon, **Imlay, R. W. (2);** *S. simitiensis* **sp. nov.** p. 53, figs., 132–135; Barremian, Cretaceous, Simiti, Bolwai, S. America, **Haas, O.**

Streblites percostatus **sp. nov.** pl. CXI, fig. 413; Ambohimaranitra; *S. pictus antsalovensis* **var. nov.** pl. CXXXIII fig. 499; Antsalova; (Kimmeridgian) Madagascar, **Collignon, M.**

Subdichotomoceras hourcqi pl. CXLVIII, fig. 592; Antsalova; *S. sikilyense* pl. CXLVIII, fig. 593; Mandarana *S. rebillyi* pl. CXLVIII, figs. 594, 595, 596; Sikily; *S. mandaranense* pl. CXLIX, figs. 597, 598, 599; Mandarana; **spp. nov.** (Tithonic) Jurassic, Madagascar, **Collignon, M.**

Subgrossouvria rakotondramazavai **pl.** XI, fig. 60, Bathonian, Mahabo-Namoroka; *S. wanneri* pl. XXI, fig. 88; *S. laplainei* pl. XXI fig. 89; Ankazomiheva; **spp. nov.** *S. gudjinsirensis perlobata* **var. nov.** pl. XXII, fig. 90; *S. eurypthycha densicostata* **var. nov.** pl. XXV, fig. 100; Besavoa *S. lavocati* **sp. nov.** pl. XXXIII, fig. 153, Callovian, Manamana, Jurassic, Madagascar, **Collignon, M.**

Sublunuloceras dynastes saonjensis **var. nov.** pl. XXXII, fig. 149; (Callovian) Saonje; *S. vendegiesi* **sp. nov.** pl. XXXVI; fig. 196; Ankirijy, (Oxfordian); Jurassic Madagascar, **Collignon, M.**

Subplanites ambohimaranitraensis **sp. nov.** pl. CXXVI, fig. 473; Ambohimaranitra; (Kimmeridgian) Jurassic; Madagascar, **Collignon, M.**

Subsaynella boyacaensis **sp. nov.** p. 51; figs. 123–127; Hauterivian, Cretaceous, Santa Rosa de Viterbo, Boyacá S. America, **Haas, O.**

Substeueroceras mutabile **sp. nov.** p. 21, figs. 39–41, 45, 47–51; Burckhardt-Jurassic-Cretaceous boundary, Quebrada Honda, Boyacá, S. America, **Haas, O.**

Taramelliceras minax iabohazensis **var. nov.** pl. XXXIV, fig. 170; Ankirihitra; (Oxfordian); *T. holderi* **sp. nov.** pl. XLVII fig. 233; Ambatomanandry; *T. besairiei* **sp. nov.** pl. LI, fig. 256; Andangovato; (Argovian) *T.* (*Strebliticeras*) *golenkoi* **sp. nov.** pl. XCIX, fig. 376; Andranomalio; *T. compsum crassa* **var. nov.** pl. CXII, fig. 414; *T. kachhense belamboensis* **var. nov.** pl. CXII, figs. 415, 416, 417; Belambo; *T. wrighti* pl. CXIII, figs. 422, 423; *T. ampanihyense* pl. CXIV, figs. 427; Ampanihy sur Bevoay; *T. bevoayense* pl. CXIV, fig. 431; Belambo, *T.* (*Metahaploceras*) *brasseuri* pl. CXIV, figs. 434, 435; Mampikony; **spp. nov.** (Kimmeridgian), *T. ultimum* pl. CXLVI, fig. 580; Ampanihy sur Bevoay; *T. hirtzi* pl. CXLVII, fig. 582; Analavelona; *T. flandrini* pl. CXLVII, fig. 583; Mandarana, **spp. nov.**. (Tithonian) Jurassic, Madagascar, **Collignon, M.**

Thurmanniceras santarosanum **sp. nov.** p. 26; figs., 54, 56–59; 61–65, 67; Hauterivian, Cretaceous, Santa Rosa de Viterbo, Bonacá S. America, **Haas, O.**

Torquatisphinctes howarthi **sp. nov.** pl. CVIII, fig. 398; Sevenava; *T. alterneplicatus flexuosa* **var. nov.** pl. CIX, fig. 399; Analavelona; *T. a. quadrata* **var. nov.** pl. CIX, fig. 400; Belambo; *T. betsibokensis* pl. CIX, fig. 401; Betsiboka; *T. mitiensis* pl. CIX, fig. 402; Sevenava; *T. rebillyi* pl. CIX, fig. 403; Analavelona; **spp. nov.** *T. torquatus belamboensis* **var. nov.** pl. CXVIII, fig. 448; Belambo; *T. transitorius* **sp. nov.** pl. CXX, fig. 453; Belambo; *T. besairiei* **sp. nov.** pl. CXXVII, fig. 477, Mampikony; (Kimmeridgian) Jurassic Madagascar, **Collignon, M.**

Treptoceras **gen. nov.** p. 253 of Tulitidae type species *Treptoceras laurenti* p. 254, pl. 7b, figs. 4a, b. c; Enfer, Crussol near Saint-Péray (Ardèche); *T. crimaciense* p. 255, pl. 7b, figs. 5a, b; 6a, b; Trept (Isère) **spp. nov.** Jurassic France, **Enay, R.** (1).

Trimarginites villersensis ankirihitraensis **var. nov.** pl. XXXIV, fig. 164; Ankirihitra; (Oxfordian); Jurassic Madagascar, **Collignon, M.**

Uhligites besairiei pl. CXLVII figs. 585, 586, 587; Andranosamonta; *U. hourcqi* pl. CXLVII, fig. 588; Antsalova, **spp. nov.** Madagascar, (Tithonian) Jurassic, **Collignon, M.**

Utaturiceras vicinale zone of the British Upper Cenomanian (Cretaceous), **Casey, R.** (4).

Valdedorsella ? whiteavesi **sp. nov.** p. 100, pl. 11, figs. 20–23, 25–28; Albian Cretaceous, Chitina Valley Alaska, **Imlay, R. W.** (1).

Vascoceras nigeriense Lower Turonian Cretaceous, internal structure, figs. **Reyment, R. A.** (1). *V. turkestanense* (**sp. nov.**) Arkhanguelsky, p. 312, pl. 61; fig. 1; Cretaceous, Ferghana, genus see p. 124, **Luppov & Drushchitz** [**in Orlov**].

Virgatosphinctes oppeli tenuicostata **var. nov.** pl. CLVI, fig. 623; Ampanihy sur Bevoay; *V. sakalavus* pl. CLVI, fig. 624; *V. falloti* pl. CLVII, fig. 626; **spp. nov.**; *V. f. perangustumbilicata* **var. nov.** pl. CLVIII, fig. 627; Mandarana; *V. rousseli* **sp. nov.** pl. CLVIII, fig. 630; Antsalova; Madagascar, (Tithonian), Jurassic, **Collignon, M.**

Wagnericeras dietrichi **sp. nov.** pl. VII, figs. 37, 37a, 37b; (Bathonian) Jurassic, Andranomantsy, Madagascar **Collignon, M.**

Wellsia vigorosa **sp. nov.** p. 206, pl. 33, figs. 19–22, 25; Hauterivian, Cretaceous, Pacific Coast States Oregon & California, **Imlay, R. W.** (2).

BELEMNOIDEA

Acrocoelites quenstedti rostral changes in the U. Lias, **Sturz-Köwing, I.** (2).

Atractites (?) *tinkari* **sp. nov.** p. 19, pl. 5, fig. 7; Trias, Tinkar-Lipu (Nepal), **Jeannet, A.**

Aulacoceras kiogari **sp. nov.** p. 15; text–figs. 3–5; pl. 4, fig. 6; Trias, Balchdhura (Kiogar) Central Himalayas, **Jeannet, A.**

Belemnella lanceolata junior ontogenetic study, **Schmid, F.** (2).

Belemnitella mucronata senior ontogenetic study, **Schmid, F.** (2).

Belemnoidea systematics general anatomy and conchometry, Mesozoic, **Krymgol'tz, G. Y.**

Dactyloteuthis irregularis, D. digitalis, D. similis and *D. hebetata* conchometry, Lias, **Sturz-Köwing, I.** (1); *D. irregularis, D. digitalis D. similis, D. meta* and *D. nodotiana* rostral changes in the upper Lias, **Sturz-Köwing, I.** (2).

Dictyoconites nepalensis p. 20, pl. 3, fig. 5; pl. 4, fig. 7; *D. habichti* p. 22, pl. 3, fig. 6; pl. 5, fig. 2; **spp. nov.** Trias, Tinkar-Lipu (Nepal); India, **Jeannet, A.**

Neohibolites minimus and *N. strombecki* from the Albian of Topal, Roumania, **Bărbulescu, A.**

Rhabdobelus subclavatus, R. toarcensis, R. forthensis, R. bergensis and *R. compactus*, Lias, conchometry, **Sturz-Köwing, I.** (1).

SEPIOIDEA

Sepia vindobonensis new occurrence Tortonian, Baden, Lower Austria, **Schaffer, H.**

INCERTAE SEDIS

†*Problematicum sahariense* **sp. nov.** p. 801; pl. XXXVII, fig. 7; Ordovician; Amguid Sahara, **Legrand & Poueyto & Rouaix.**

†Class Coniconchia

Hyolithoidea.—†Hyolithoidea systematic study of orders, families and genera, **Sysoev, V. A.** (1).

†*Hyolithes imbricatus* **sp. nov.** p. 340, pl. XIX figs. 10a–b; Dictyites zone Cambrian, South Korea, **Kobayashi, T.** (2).

†*Quinquelithes pavonaceus* **sp. nov.** p. 399 (357) figs. 2Ba–b; Lower Cambrian, Yakutia A.S.S.R., **Syzoev, V. A.** (1).

†*Trapezovitus sincus* **sp. nov.** p. 400 (356) fig. 2Aa–d; Lower Cambrian, Yakutia A.S.S.R., fam. Sulcavitidae, **Syzoev, V. A.** (1).

Tentaculitoidea.—†*Contractenus* **gen. nov.** p. 81, of Tentaculitidae type-species *C. markovskii* **sp. nov.** p. 81, pl. 14, figs. 1–4; Devonian, Chelyabinsk province, Russia, **Lyashenko, G. P.**

†*Heteroctenus tagangaevi* p. 85, pl. 7, figs. 1–4; Efremo-Zikovo, Orenburgsk Province; *H. verchovensis* p. 87, pl. 9, figs. 1–3; Verchovskaya, Stalingrad Province; *H. lanciformis* p. 89, pl. 8, figs. 1–3; Ryazansk Province; **spp. nov.** Devonian, central Russia, **Lyashenko, G. P.**

†*Homoctenus tikhyi* p. 98, pl. 18, fig. 1–4; Tatarskaya A.S.S.R.; *H. kikinensis* p. 99, pl. 19, figs. 1–4; Timan horizon; *H. acutus* p. 99, pl. 19, figs. 12–13; Rivers Yaregh and Ukhta; *H. tokmovensis* p. 100, pl. 19, figs. 5–11; Tokmov; *H. variabilis* p. 103, pl. 18, figs. 5–8; Tatarskaya; *H. nanus* p. 103, pl. 20, figs. 4–16; Morsov, **spp. nov.** Devonian, Russia, **Lyashenko, G. P.**

†*Novakia karpinskii* **sp. nov.** p. 116, pl. 25, figs. 4–5; River Vaghran, Devonian, Central Russian platform, **Lyashenko, G. P.**

†*Polycylindrites jareqae* p. 105, pl. 23, figs. 4–6; R. Yaregh; *P. semigradatus* p. 106, pl. 21, figs. 1, 2; Baitughan, *P. menneri* p. 108, pl. 23, figs. 1–3; **spp. nov.** Devonian, Russia, **Lyashenko, G. P.**

†*Styliolina uralica* p. 127, pl. 29 figs. 1–5; Fedorovka; *S. domanicense* p. 130, pl. 30, fig. 5; Domanik; *S. grandis* p. 131, pl. 31, fig. 1; Kabik-Kuper; *S. devoniana* p. 132, pl. 31, figs. 2–4; Baitughan **spp. nov.** Devonian Central Russia, **Lyashenko, G. P.**

†*Tentaculites kalugianus* p. 76, pl. 1, figs. 1–4; Kaluga; *T. semilukianus* p. 79, pl. 2, figs. 1–3; River Don, Semiluki *T. donensis* p. 80, pl. 3, figs. 1–2; River Don, Petino; **spp. nov.** Devonian, Central Russia, **Lyashenko, G. P.**

†*Uniconus kremsi* p. 111, pl. 17, figs. 1–4; *U. livnensis* p. 112, pl. 16, figs. 1–3; **spp. nov.** Ryazansk province, Devonian Russia, **Lyashenko, G. P.**

†*Viriatella soivensis* p. 118, pl. 26, figs. 1–2; Kedrovka; Soiven horizon; *V. tarchanensis* p. 119, pl. 26, figs. 5–7; Tarchan, *V. devoniana* p. 120, pl. 26, figs. 3–4; Efremo-Zikovo; *V. kinelensis* p. 121, pl. 27, figs. 1–4; Sultanghulovo; *V. kasanlensis* p. 121, pl. 27, figs. 5–7; Kazanla *V. panica* p. 122, pl. 28, figs. 1–2; Panika; Stalingrad province; *V. spatiosa* p. 124, pl. 28, figs. 3–5; Mukhanov, **spp. nov** Devonian, Russian platform, **Lyashenko, G. P.**

ERRATA

Z.R. 96, 1959, p. 19. "**Kingkoo C[hao]**", on the Triassic ammonoids of China. The author should read "**Chao, Kingkoo.**" See Systematic Section (1959), Ammonoidea, for new names erroneously attributed to Kingkoo, C.